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Social Insurance Commission
Report Jan. 25, 1917

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LETTER OF TRANSMITTAL.

...bers of the Senate and Assembly of the
...rnia Legislature, Forty-second Session.

...MEN: In accordance with Chapter 275 of the Statutes of 1915, ...t herewith the report of the findings and recommendations ...commission appointed by his Excellency, Governor Hiram W. ... to investigate social insurance.

PAUL HERRIOTT, Chairman.
KATHARINE C. FELTON.
DR. FLORA W. SMITH.
MRS. FRANCES N. NOEL.
GEORGE H. DUNLOP.

...cramento, California,
January 25th, 1917.

CONTENTS.

PAGE.

HISTORY OF THE COMMISSION 7

FINDINGS AND RECOMMENDATIONS OF COMMISSION 11

In General—Conditions in the United States—Conditions in California—Recommendations of Commission—Proposed Constitutional Amendment—Possible Organization of Health Insurance in California.

CALIFORNIA SURVEY 25

Burden Illness Puts on Wage Earning Families—Burden Which Illness Puts on Public—Efforts of Wage Earners to Protect Themselves—Efforts of Employers to Protect Employees—Field Survey of South San Francisco and an Industrial District of San Francisco—Hospital Facilities of the State—Conclusions.

FIELD OF SOCIAL INSURANCE 125

Industrial Accident Insurance or Compensation—Health Insurance—Maternity Insurance—Old Age and Invalidity Insurance—Unemployment Insurance—Life Insurance—Principles of Distribution of Cost.

HEALTH INSURANCE IN FOURTEEN COUNTRIES 147

Part I, Compulsory Systems—Germany—Austria—Hungary—Luxemburg—Great Britain—Russia—Roumania—Servia—Norway—Netherlands; Part II, Voluntary—Subsidized Systems—Denmark—Switzerland—Sweden—France.

SOCIAL RESULTS OF SOCIAL INSURANCE 209

EXISTING FACILITIES FOR INSURANCE OF WAGEWORKERS IN THE UNITED STATES 223

In General—Trade Unions—Fraternal Orders—Establishment Funds—Commercial Insurance Companies.

SOCIAL INSURANCE MOVEMENT IN THE UNITED STATES 245

In General—Public Life Insurance—Health Insurance—Old Age Insurance and Pensions—Unemployment Insurance—Mothers' Pensions and Orphans' Aid—Committees on Social Insurance—Attitude of American Students on Social Insurance.

ESTIMATES OF COST 285

Estimate of Number Subject to Health Insurance—Computation of Pay Roll Exposed—Probable Rate of Sickness—Cost of Medical Aid—Cost of Hospital Care and Drugs—Computation of Cost.

CHAPTER I

HISTORY OF THE COMMISSION.

INTRODUCTORY.

In the spring of 1915, insistent problems of dependency and destitution were called to the attention of the California legislature. It was pointed out that destitution was a growing social disease, that public relief was at best an undemocratic palliative, that demands for assistance were increasing at such an alarming rate as to become an intolerable burden upon public funds.

The need of coping with this disease of destitution in a way calculated to prevent its future inception and growth was reiterated by social workers and they testified to the beneficial effects of the Workmen's Compensation Act, which insured the wage earner against the disastrous results of industrial injuries. They pointed out that workmen's compensation was but a part of a comprehensive protective system worked out in European countries, under which system, if the worker fell ill, he was entitled to medical attention and a substantial part of his wages; if he became an invalid or reached old age, he was entitled to a pension for the rest of his life; if he was out of employment, he was maintaned until a job was available, while if he died leaving dependents, these dependents were given a pension. This protective system, to wit: social insurance, was designed to prevent and relieve destitution. It involved the establishment or assistance by the government of insurance of working men against the loss of earning capacity from any or all causes. The cost of this insurance was met partly by the working men, partly by their employers and partly by the state.

In view of the fact that one phase of social insurance had been so successfully transplanted to this country and was being effectively and efficiently administered by the Industrial Accident Commission of this state, the possibilities of benefit from other branches of social insurance suggested itself to persons interested in social progress. Accordingly, a bill creating an unsalaried commission to investigate the whole problem was introduced in the legislature and was passed by that body as Chapter 275 of the Statutes of 1915. It became a law by the signature of the Governor on May 17th and went into effect the following August.

Pursuant to the terms of the act, Governor Hiram W. Johnson appointed the five following members: Katharine C. Felton, San Francisco; Mrs. Frances N. Noel, Los Angeles; Dr. Flora W. Smith, Kingsburg; George H. Dunlop, Los Angeles; John Francis Neylan, Sacramento.

These appointees meet for the organization meeting of the California Social Insurance Commission on Monday, September 27, 1915, in Sacramento. Mr. Paul Herriott, of Sacramento, was later appointed

to fill a vacancy created by the resignation of Mr. Neylan and was elected chairman.

The commission was required to make a careful study of European systems of social insurance, to determine whether California needed and was ready for a further development of social insurance, to prepare careful estimates of the cost of any legislative step it might advise and to incorporate the results of its work in a report to the following legislature.

The commission realized early in its studies of the European systems that however great the need might be in California of a complete system of social insurance, problems of cost and administration would prevent the state from adapting the whole complex scheme to California conditions at one time. It was decided, therefore, to include in the report a general survey of the entire field of social insurance and to center the California investigations upon one branch.

The importance of the problem of increasing cost which state aid to orphans and half orphans was creating for the State Board of Control was discussed by the commission. Since, however, the branch of social insurance which attempts to meet this problem, to wit: life insurance for the benefit of dependent children, was still in the first stages of its development in Europe and since also it was the most technical and difficult of administration of all the phases of the subject, it was deemed impracticable to think of it as a possibility at this stage of the development of social insurance in the United States.

The choice of health insurance for concentrated study did not mean that it was necessarily the most important phase of social insurance. Health insurance was selected for several reasons—actuarially and in point of administration it was the simplest branch of the complex social insurance scheme; it was most closely allied to industrial accident and could most easily be adapted to the mechanism worked out for the existing state fund. Finally, the unanimous advice of the eastern men and women who had carefully studied social insurance problems was to center all efforts upon health insurance.

In order to have the benefit of expert advice in this pioneer work, the commission secured the services of Dr. I. M. Rubinow, of New York City, as consulting actuary for six months from July to January. In January, 1916, Miss Barbara Nachtrieb was appointed executive secretary to take charge of the active work. The secretary, who was in New York at the time, was directed to spend a few weeks in the eastern cities in consultation with the leading experts on social insurance and in digesting the important works on social insurance. This plan was carried out. The commission, at its February meeting, received a report of the eastern work, and very soon thereafter the investigations were commenced.

CHAPTER II

FINDINGS AND RECOMMENDATIONS OF THE COMMISSION

SECTION I.

In accordance with the terms of the act, by virtue of which the Commission was created, the investigations undertaken and reported upon herewith, include:

(*a*) The various systems of social insurance now in operation in different foreign countries.

(*b*) A special study of compulsory and voluntary subsidized health insurance systems in fourteen European countries.

(*c*) Evidence as to the general effect of social insurance upon the economic status of wageworkers in Europe.

(*d*) Facilities available for insurance of workmen in the United States.

(*e*) A general survey of conditions of employment in California, such as average wages, unemployment and health conditions of several working communities.

(*f*) The cost of medical aid and hospital care in relation to the earning capacity of the average wageworker.

(*g*) Present facilities for public care of the indigent sick in California, such as available free hospital space, and out-patient clinics.

(*h*) The problem of poverty and destitution in California, especially in their connection with sickness.

(*i*) The present extent of voluntary health insurance in California through fraternal orders, trade unions and commercial insurance companies.

In addition the Commission has held public hearings to determine the attitude of public opinion on the question of the advisability of compulsory health insurance in the State of California.

On the basis of all the information collected the Commission finds, as follows:

(1) Social insurance in its various branches represents a world-wide movement which embraces not only all of Europe but a large portion of the British Empire, and has made its beginnings in Asia and America. It is at the present one of the most important movements in modern social and labor legislation. All modern, civilized and industrial countries have some social insurance legislation in force. The most important and progressive foreign countries also possess the most comprehensive social insurance systems.

(2) Social insurance methods represent a practical and effective means of counteracting at least some of the harmful results of modern industrial conditions upon the well-being of wage earners, and especially of preserving those persons who for some reason or other cease being independent producers either temporarily or permanently.

(3) While no country in the world has as yet succeeded in abolishing poverty or even destitution and the need for charitable relief, much has been accomplished toward that goal in several countries by means of the existing social insurance systems.

(4) In addition to this relief of destitution, social insurance has proved to be a powerful factor for the preservation of life and health, through the "safety-first" movement, through improved care of the sick and invalids and through regularization of employment. In several countries the increased span of life and improved health conditions are largely ascribed to the influence of social insurance institutions.

(5) The success of the social insurance institutions appears to be largely dependent upon their compulsory character. Both in the number of the persons protected and in the quality of services rendered, compulsory insurance systems appear to be vastly superior to the voluntary ones.

(6) Different racial and national conditions and different political organization seem to have had little effect upon the existence and extension of social insurance institutions in various countries.

(7) Next to compensation for industrial accident compulsory health insurance is the most highly developed form of social insurance in Europe and it has followed accident compensation in several countries as the next step in the extension of social insurance.

After investigation of conditions throughout the United States the Commission further finds that:

(1) Millions of wageworkers recognize the advantages of the insurance method in general for protection against the hazards of the wageworker's existence. This is demonstrated by the numerous insurance institutions which they have created and in which they participate as for instance, trade unions, benefit funds, fraternal orders and other benevolent societies.

(2) Nevertheless, in absence of legally established systems, the benefit of voluntary insurance has as yet been extended to a comparatively small part of the American wageworking population except for funeral insurance. However, the benefits rendered by these voluntary institutions are far from sufficient to meet the need.

(3) Since the industrial accident compensation movement has swept the country there has been considerable discussion of all other branches of social insurance by governmental commissions, voluntary committees and labor organizations as well as public opinion at large.

(4) There has been a decided change in the attitude of American students of economic and sociological problems towards social insurance methods, so that instead of the general opposition of ten years ago the Commission finds among them at present an almost unanimous support

of the compulsory social insurance method of coping with the problem of destitution in this country.

Of the experts on economic and social problems consulted the majority agreed that health insurance is the particular branch of social insurance which can and should be developed next in this country.

Finally, on the basis of statistical information gathered in its California investigation toward which the greatest part of the efforts of the Commission were directed, the Commission finds that:

(1) While the rate of weekly wage is higher in California than in Eastern states, the earning power of the majority of the wageworkers is not sufficiently high to enable them to go through an attack of serious illness without a very grave hazard to their economic well-being.

(2) The loss of earnings through unemployment is very large, thus materially affecting the annual income.

(3) The expenses of treatment of the sick are heavy in California, as they are throughout the Pacific coast, and considerably heavier than in other parts of the country.

(4) The Commission has no intention of criticizing the charges made by the medical profession for its services. Comparison of the standards of payment for medical services with the incomes of the large proportion of the wageworkers, leads to the conclusion that medical aid at the ordinary rate of payment is not within the means of a large number of wageworkers.

(5) The cost of private hospital service is beyond the reach of the paying capacities of most wageworkers, and with the exception of a very few county hospitals and a few private hospitals to which free patients are admitted, the available beds in the ordinary county hospitals offer facilities which are recognized by the proper authorities to be unsatisfactory and which are not acceptable to the large number of wageworkers.

As a result free hospital facilities are decidedly inadequate. In comparison with the standard of five hospital beds per thousand of population, California has only one free hospital bed per thousand.

(6) As a result of these conditions, the Commission finds there is a rapid increase in the use of free clinics, lodge practice of medicine, mutual hospital associations and commercial hospital associations, patronized largely by wageworkers.

(7) In investigating the relief work which charitable organizations, public and private, are called upon to perform, sickness was found to be the largest single cause of dependency.

(8) Despite the hardship which illness brings to the individual wage earner, investigations disclosed the fact that California has a comparatively low sickness rate—an average of six days per person is lost each year because of sickness.

(9) A full investigation of the existing insurance facilities shows conclusively that health insurance is an institution with which the people of California, and especially its working men and working women are familiar through fraternal orders, benefit societies, trade unions and to some extent through commercial insurance companies.

Probably not more than one-third of California wageworkers have voluntarily insured themselves against the hazard of sickness, and these voluntary efforts reach only an extremely small proportion of the people who need it most. In most cases the entire financial burden is placed upon the wageworkers themselves and therefore the funds collected are usually inadequate to provide support during illness and scientific medical care. This is particularly true of medical and hospital services furnished except in a very few large corporations.

As a result of these findings, the Commission has arrived at the conclusion that legislative provision for a state-wide system of compulsory health insurance for wageworkers and other persons of small incomes would offer a very powerful remedy for the problem of sickness and dependency in the State of California.

In selecting health insurance as the particular branch of social insurance best adapted for earliest action, the Commission was guided by the following conditions:

(*a*) Health insurance appears logically to be the next step in development after accident compensation.

(*b*) It offers the least actuarial and organizational difficulties as compared with other more complicated branches of social insurance which require provision of substantial reserves.

(*c*) While the grave character of the problem of unemployment can not be denied, no system of unemployment insurance in California would appear practicable until further measures are taken to reduce the amount of unemployment. Moreover, unemployment insurance is a comparatively new institution with a very limited amount of experience available at present.

(*d*) Old age insurance presents such serious actuarial and financial problems that the Commission does not feel in a position to make any recommendation concerning it at this time. Further study of the problem, especially as to the comparative merits of the methods of compulsory insurance and straight old age pensions, would be required.

(*e*) It is claimed, and with some justice, that in both the field of old age and unemployment insurance national action may be necessary; while the problem of dependency due to sickness is largely a local problem amenable to state action.

In the opinion of the Commission the principle of health insurance is familiar to the people of the State of California. Undoubtedly a system of public compulsory insurance introduces certain elements of

comparative novelty, but even during the existence of the Commission growing understanding and approval of this novel principle could be easily observed. This was brought out very clearly in the hearings held in San Francisco, where the predominating majority of witnesses representing employers, organized labor, social workers, the medical profession and students of economics, went on record as approving the general principle of compulsory health insurance.

There are essential provisions upon which the Commission has reached an agreement. In order to meet the problems of destitution due to sickness and in order to make health insurance a valuable adjunct to the broad movement for the conservation of public health, any legislation on this subject should, in the opinion of the Commission, provide (*a*) for a compulsory system for the conducting of the insurance by non-profit making insurance carriers (*b*) for a thoroughly adequate provision for the care and treatment of the sick and (*c*) for contributions from the insured, from industry and from the state.

In the opinion of learned attorneys, however, there appear to be certain constitutional obstacles in the way of legislative action. The Commission recommends therefore a following amendment intended to remove these difficulties. The two years' delay incident to the introduction of such a constitutional amendment and its submission to a vote of the people is of itself not an undesirable feature. Legislation of such magnitude which must affect the interests of so many different social groups should not be passed without giving the whole people an opportunity of thoroughly studying the underlying principle and expressing their collective will. The constitutional amendment requiring submission to the vote of the people will undoubtedly stimulate such study.

Further study of the problems of health insurance will not fail to influence the numerous details of the system to be finally organized, and therefore the Commission does not feel prepared to submit, at this time, a draft of a bill as a part of its report.

PROPOSED CONSTITUTIONAL AMENDMENT.

It is hereby declared to be the policy of the State of California to make special provision for the health and welfare of those classes of persons, and their dependents, whose incomes, in the determination of the legislature, are not sufficient to meet the hazards of sickness. The legislature may establish a health insurance system, applicable to any or all such persons, and for the financial support of such system may provide for contributions, either voluntary or compulsory, from such persons, from employers, and from the state by appropriations.

The legislature may confer upon any commission or court, now or hereafter created, such power and authority as the legislature may deem requisite to carry out the provisions of this section.

The provisions of this section shall not be controlled or limited by any other provision of this constitution, except the provisions of Article IV thereof, relating to the passage and approval of acts by the legislature and to the referendum thereof.

SECTION II.

DISCUSSION OF POSSIBLE PROVISIONS OF A HEALTH INSURANCE SYSTEM FOR CALIFORNIA.

To draft even a tentative bill for health insurance in California at this time has seemed to the Commission premature. While the Commission is not ready to discuss details of a system, it is convinced that the form of organization contemplated by the well-known bill of the American Association for Labor Legislation, will inevitably give rise to certain difficulties which can be avoided through another plan of organization, and which must be avoided in a system designed to meet conditions in California.

I. The Commission believes that unions, fraternal societies and other voluntary organizations now engaged in health insurance should be given a place under a state system and should be encouraged to continue and develop their activities; that the compulsory system should not drive out the voluntary, nor substitute purely formal units of organizations for associations in which men are bound together by ties of friendship, loyalty and mutual interest.

The plan suggested in the bill of the American Association for Labor Legislation places voluntary societies at such a competitive disadvantage as practically to bar them out from any participation in health insurance; for while insurance in these societies is permited in lieu of other forms of compulsory insurance they do not receive the employers' contribution, which amounts to from 33⅓ to 40 per cent of the entire insurance premium. Thus these societies are placed at a competitive disadvantage so great as to be disastrous. Few of their members will continue to insure with them when they can save one-third of the premium by insuring elsewhere.

II. Knowing the many difficulties and complexities of its own with which health insurance must grapple, the Commission favors a form of organization which does not force employers and employed to join in the administration of the system, and for this reason opposes the plan proposed by the American Association for Labor Legislation which places the immediate local control of health insurance in the hands of district mutual associations governed jointly by the employers and employed. Under such a system the Commission fears that with the administration in the hands of representatives of these two groups, there would be a likelihood of deadlocks on disputed issues.

III. The Commission believes that the success of health insurance will depend largely upon the efficiency of its management and, therefore, upon the ability and integrity of those selected for executive and

*Chapter IV.

administrative positions. The Commission is, therefore, opposed to the plan of organization suggested in the bill under discussion because the method which it provides for selecting those who are to administer the health insurance system gives no assurance that persons of special fitness or ability will be chosen. For while the plan under consideration provides for a state insurance commission appointed by the governor, the duties of this commission are largely supervisory and judicial. The direct administration of health insurance is entrusted to local mutual associations to which all the employed, subject to the system and not otherwise insured, and their employers, belong.

Employed and employers meet separately and elect representatives to a central committee. The representatives so chosen elect an equal number of directors. These directors, chosen jointly by employers and employed, constitute the governing body of the local fund.

Under this system a new electorate is created. So far at least as the insured are concerned, it is made up of persons who are practically strangers to each other. Union and nonunion, skilled and unskilled, come together simply for the purpose of this single election. Political experience suggests the result to be expected from such a system of election.

While the Commission believes that the difficulties under consideration are inherent in any system which make the district mutual association, governed by employers and employed, the standard carrier, it is convinced that these difficulties can be avoided under a different plan of organization. In substantiation of its belief it offers, in brief outline, the following plan of organization from which these difficulties seem to be eliminated. This plan has been suggested by and conforms closely to the present organization of industrial accident insurance in California.

Its central features are the separation of cash and medical benefits and the provision that the insured shall pay the entire cost of the cash benefit. * Under such a system it obviously becomes a simple matter to provide that the workman who pays the entire cost of his money benefit may insure in any fraternal organization, union or voluntary society which he may select provided that such organization has been approved by the state as financially sound.

A state fund for carrying cash benefits will also be established as part of the system so that, if the workman does not care to insure with a voluntary organization, he may insure with the state. In either case he pays the entire cost of the insurance secured. Under this arrange-

*For this suggestion the Commission is indebted to Theodore Johnson, attorney for the San Francisco Labor Council.

ment the state fund carrying cash benefits receives no subsidy from employers or from the state fraternal organizations and other voluntary societies are therefore not placed in a position of competitive disadvantage in relation to it.

The state fund should set a rate fully covering all cost of administration but allowing for no profit. This would become the standard rate, checking possible waste or inefficiency on the part of private societies.

While under this system the insured pay the entire cost of the money benefit and select their own insurance carriers, the contributions of employers and of the state are paid directly into the state fund and are used primarily to meet the cost of the medical benefit. The administration of this fund and the organization for medical aid will be vested in a state insurance commission which is also made responsible for the administration of the entire health insurance system. This commission is to be composed of full time salaried members appointed by the governor. The employer, the insured, the medical profession and probably the public should be represented on it. This plan of organization corresponds closely to the Industrial Accident Commission which administers the system as a whole and which also controls and administers an insurance fund which is in competition with other funds.

Under the administration of industrial accident insurance the employer pays the entire premium and therefore there is no necessity for the separation of cash and medical benefits. Under health insurance, where there may be necessity for such separation the administration of the medical benefit is centered in the state. The state health insurance fund, under this system, therefore becomes (1) * the sole and only carrier of medical benefits; (2) one but not the sole carrier of cash benefits.

While under this system employers and employed are not arbitrarily brought together in the administration of health insurance they should be allowed to come together in establishment and trade funds when both employers and employed desire to do so. In such cases the employers' contributions should be paid to the fund and not to the state. The fund should be allowed considerable freedom in the organization of medical aid. By allowing the voluntary organization of these trade and establishment funds, all the benefits and none of the disadvantages of joint administration by employers and employed are secured and the administration of the system is made more elastic and flexible.

In order to simplify the statement of the plan only two principal benefits have been referred to, namely, the cash and the medical. There are, of course, other subsidiary benefits the cost of which should be apportioned by the insurance commission between the insured, the employers and the state so that each bears the approximate proportion

*Except as trade and establishment funds are allowed to carry their own medical benefits.

of the entire cost assigned to it. If this plan is adopted the act should specify approximately and not absolutely, the proportion of cost to be borne by the three contributors.

According to the estimate of cost made by Dr. Rubinow and others the cash benefit will probably range between 33⅓ and 37½ per cent of the entire cost of the prescribed benefit. Any of the various plans suggested require the insured to pay, at least, 40 per cent of the entire cost of the insurance. It is therefore reasonable to suppose that the insured can always pay the entire cost of the cash benefit and in addition the cost of some other subsidiary benefits.

According to Dr. Rubinow's estimate the cost of medical care for the insured and his family may be expected to range between 33⅓ and 39 per cent of the entire cost of the prescribed benefits. Under any of the systems this will be less than the proportion of cost assigned to the employers and the state, while under the bill prepared by the American Association for Labor Legislation the employers alone are required to pay 40 per cent of the entire cost. It seems reasonable there to expect that the contributions of the employers and the state will always suffice to meet, at least, the entire cost of medical aid.

ORGANIZATION OF MEDICAL AID.

Under this system the organization of medical aid will be in charge of the commission itself which will, after conference with the physicians, fix the rate of compensation for their services and which will appoint a medical director who will be in charge of a corps of district medical inspectors. These inspectors will be in charge of the work in the various districts established for administrative purposes.

In each district a panel of physicians will be established and organized under the direction and supervision of the district medical inspector. Under a system of free choice, which will probably be the one established in California, all licensed physicians, willing to accept the compensation fixed by the commission and to abide by the committee's regulations, may register on the panel and the insured may choose from any of the physicians so registered.

It can not be urged against the system here suggested that it fails to protect the employers' interests—for the employers will have representation on the commission which will appoint the medical director and determine the rate of compensation to be given to physicians. The cost of medical care will depend upon the rate of compensation so fixed and the efficiency of the supervision exercised by the medical inspectors. Employers will also be represented on a central advisory committee appointed to work with the commission and any district advisory committees working with the district medical officers. Again, the employers' interest is automatically protected by the insured themselves in

their unions and fraternal organizations who control the administration of the cash benefit; for men do not malinger to get more attention from the doctors but to secure the cash benefit. The insured, paying the entire cost of the cash benefit, will have direct interest in preventing malingering and in so doing will automatically hold down the cost of medical service.

The plan of organization which is suggested here is supported by the best political experience we have. In a democracy the greatest possible efficiency of administration is secured by giving the governor a wide appointive power and holding him strictly responsible for the result. This policy has been followed in recent years in California and the marked efficiency of the Industrial Accident Commission and the Railroad Commission stand out in confirmation of this theory. As health insurance will directly affect some two million people in the state no governor will risk inefficient administration of the system as it would probably wreck his career as executive. Therefore we may reasonably expect that great care will be exercised in the selection of the insurance commission and the commission, in turn, will use the same care in the selection of its executive officers.

It can not be fairly urged that in the interest of efficiency this plan sacrifices local interest and tends to establish a bureaucratic and centralized system—first, because in the medical administration it provides for local advisory boards and the free choice of physicians, thus bringing into the system the majority of the medical profession; secondly, in the administration of the cash benefit it accepts as funds, lodges, fraternals, unions, etc., and so brings into the administration of the system many local organizations and forces the state fund to enter into competition with them.

In conclusion the Commission does not wish its purpose misunderstood. It is not, at this time, prepared to offer a plan for the organization of health insurance. It sees what it believes to be serious objections to the plan of the American Association for Labor Legislation which has been given the greatest publicity. It believes that these objections can be obviated through other forms of organization. In briefest outline it sketches a plan of organization which it believes free from these objections. This plan may, however, be open to objections still more grave. It is submitted at this time simply for the purpose of study and debate.

CHAPTER III.

THE CALIFORNIA SURVEY.

THE CALIFORNIA SURVEY.

INTRODUCTION.

Due to limitations placed upon the survey because of the funds available, all the field work performed by personal agents of the commission was confined to the two largest cities, San Francisco and Los Angeles. Inquiries covering the entire state were, except in the two centers mentioned, carried on by correspondence. The investigations were planned for the purpose of estimating the burden that illness was creating in California and to find out how that burden was being carried. With these ends in view the following pieces of work were undertaken and completed:

1. A study of the wage standards in the trades and industries in the various parts of the state and an investigation of the normal amount of employment secured by the average worker in some leading trades.

2. The actuarial study of over 100,000 years of sickness experience of the larger unions and lodges to suggest the approximate rate of illness of California wageworkers.

3. A study of the rates at which medical and hospital care can be purchased by the working man or woman.

4. The securing of an accurate statistical record of the various ways in which the wage earners are at the present time protecting themselves against sickness and the number of persons thus protected.

5. The obtaining of a statistical record of the various ways in which employers in the field of manufacturing, lumbering, mining, railroading and other public service are providing for the illness of their employees and the number of persons affected.

6. The careful study of the schemes of organization of the societies giving sickness protection to determine the degree of adequateness of the protection offered.

7. A study of the standard of living and wages of over 4,500 patients of the five largest free clinics in the state.

8. An analysis of over 5,000 families appealing to charity in San Francisco and Los Angeles to ascertain statistically how much dependency is due to illness.

9. An investigation of the financial burden which sickness caused prior to application for charitable assistance, in families coming under the observation of charity agencies.

10. The obtaining of a record of the moneys expended by the counties and cities for relief of indigent sick, to determine the burden sickness puts directly upon the public funds.

11. The obtaining of a statistical record of the number of cases

treated annually at all the free clinics and dispensaries of the state, the equipment of such clinics, cost of maintenance and other details.

12. An investigation of the experience of over 1,000 individual women wage earners in San Francisco and Los Angeles to find out the burden which sickness has put upon their incomes.

13. A field study of the industrial town of South San Francisco, where wages are high, and also of an industrial district of San Francisco where wages are low (house to house investigation) to obtain a cross-section of the health and economic conditions of the inhabitants and to find out the extent to which they are already protected against sickness through voluntary insurance.

14. A study of over 4,500 tuberculosis reported cases in southern California from the standpoint of the length of their residence in this state at the time of being reported as tuberculosis sufferers, to ascertain to what extent tuberculosis is a home problem in California.

15. A study of the hospital space available and its distribution throughout the state.

In addition, public hearings[1] were held in San Francisco for three days and one evening during the latter part of November. Leaders in professional, industrial and social work presented their views on the subject of health insurance and were cross-examined as witnesses under the direction of Dr. I. M. Rubinow, the consulting actuary. The hearings aroused a great amount of public interest and enthusiasm and proved very educational to the commission as well as to the large group of persons in constant attendance.

Despite the tremendous scope of the subject under investigation which would merit a study of years rather than months, the data and statistics gathered were sufficient to be of great suggestive value.

For the sake of clearness and simplicity the discussion of the material collected and analyzed in this chapter is divided into seven sections as follows:

1. Burden which sickness puts upon wage earners.
2. Burden which sickness of wage earners puts upon the public.
3. Efforts of working people to protect themselves against the financial losses of illness.
4. Efforts of employers to protect employees.
5. Field study of South San Francisco and an industrial district of San Francisco.
6. Hospital and clinic equipment of the state.
7. Conclusions.

A certain amount of arbitrariness was of course exercised in the

[1]Due to the bulk of the evidence presented at these hearings it was impossible to publish the transcript complete. The entire copy is on file.

assigning of the material to the different sections because of the impossibility of classifying all the data under any sharply defined headings.

In order that the discussion should not be unnecessarily interrupted by the interposing of statistical tables to the confusion of the nonstatistical reader, the plan has been followed, wherever possible, of placing the tables illustrative of the text at the end of the section.

SECTION I.

BURDEN IMPOSED ON WAGE EARNERS BY ILLNESS.

Wage Statistics.

Expenditures, no matter how large, are of themselves of little significance. Only in relation to comparatively small earnings do expenditures become burdensome. Our first question in attempting to measure the financial burden of sickness is, therefore, "What are the earnings of the California wageworkers?" In presenting wage statistics as the answer to this query, the comment should be made that the discussion of wage statistics in California is of less significance than would be the case in some communities, because of the important part played by unemployment in the determination of the really vital factor—the annual income at the disposal of the worker.

There is practically no scientific information bearing on this important question of unemployment. The Bureau of Labor Statistics of the state has recorded the monthly fluctuations of the number of employees in the manufacturing establishments.[2] This indicates that an average of almost 10 weeks per person is lost each year through unemployment in the manufacturing industries.

The attempt on the part of the commission to discover the average number of weeks of employment secured by the worker in the leading trades in San Francisco proved a failure from the standpoint of accurate statistics. A sufficient number of card records were obtained, however, to be of suggestive value in regard to a few trades. In the building trades it is probable that the average annual loss is nearer seventeen weeks.[3]

It must be borne in mind, therefore, that in California unemployment vitally affects the worker's annual income and that wage statistics show maximum earning power—in many cases never realized.

The wage statistics here analyzed were not the result of a first-hand investigation by the commission. Aside from the point that time and financial resources at the disposal of the commission would have made such an undertaking practically impossible, it was unnecessary in the face of the material available. Through the courtesy of the Bureau of Labor Statistics, the Industrial Welfare Commission and the Railroad Commission, the commission made use of the following data:

1. Classified wages in manufacturing industries, including the wages of 66,000 employees in 1,576 establishments on December 15, 1913, pub-

[2] See Table I at end of Section I.
[3] See Table II at end of Section I.

lished in the sixteenth biennial report of the Bureau of Labor Statistics and quoted without change.

2. Data in regard to membership of 50,000 persons in various organizations of this state on file at the Bureau of Labor Statistics. From this data there was compiled by the commission a classified table of distribution according to wages. In many instances the wages were stated in such a way that their inclusion in the table seemed inadvisable. In the construction of the table the daily wage rates were reduced to weekly wages. Barring a certain element of inaccuracy which may be present because of the above adjustments, the resultant table is fairly representative.

3. Classified wages of over 20,000 working women in the 1913–1914 report of the Industrial Welfare Commission quoted without change.

4. Average daily earnings of various occupations in railroad transportation for the five main railroads within the State of California, as well as the average for the five railroads weighted in proportion to the mileage of the roads in California, quoted without change.

Any change in wage standards occurring since December, 1913, will, of course, render the wage data of this volume to that extent inaccurate. Complete tables of such classification are shown at the end of the section.

In the manufacturing industries[4] employing organized and unorganized labor, over 12 per cent of the male employees are paid less than $12 per week for their services. Only a fourth of those employed in manufacturing concerns fall between $12 and $15 per week, another fourth receiving between $15 and $18. The percentage whose weekly earning capacity is over $25 is practically the same.

In the remaining statistics discussed it should be noted that wages of organized labor only are recorded. Of course, the wages of unorganized men in the same industries are in general lower.

In the field of transportation[5] in the establishments employing organized labor, it will be noted that practically no male employees receive less than $12.50 per week. Over half are being paid between $12.50 and $15 per week, while almost 90 per-cent have an earning capacity of less than $25 per week. Less than 5 per cent receive a weekly wage of more than $30.

Over one-third of the organized men employed in restaurants, mercantile establishments, theaters,[6] etc., secure less than $12.50 per week, yet the remaining two-thirds receive a slightly higher level of wages than is found in either transportation or manufacturing.

The wage schedules of the labor organizations in the building trades[7] show much higher standards. Less than 0.2 per cent of those analyzed

[4]See Table III at end of Section I.
[5]See Table IV at end of Section I.
[6]See Table V at end of Section I.
[7]See Table VI.

receive less than $15 per week; less than 8 per cent receive less than $20 per week. Fifty-seven per cent are paid $25 a week or over.

Attention should be particularly drawn to the effect of unemployment in leaving these figures for observation. Unemployment plays an unusually heavy part in the determination of the income in building trades.

Turning to the wages paid to women, we find, of course, distinctly lower standards.

Practically 40 per cent of the women employed in manufacturing establishments[8] receive less than $8 per week, 50 per cent less than $9, and 75 per cent receive less than $11. Less than 20 per cent are paid more than $12 per week.

In the mercantile establishments[9] (including retail candy, millinery, five and ten-cent stores) wages are slightly higher, 40 per cent of the employed receiving less than $9 (in place of $8), 50 per cent less than $10, and 32 per cent being paid $12 and over per week.

The laundry workers[10] have fewer in the very low-paid classes, only one-fourth receiving less than $8. Practically all those receiving less than $8 are in Los Angeles. The San Francisco Laundry Workers' Union has a minimum rate of $8.50 per week. Between $8 and $12 there is practically the same apportionment as in the case of the employees of manufacturing establishments.

Looking at women's wages, all occupations combined,[11] we find substantially the same picture. Twenty per cent receive less than $7 per week, 44 per cent are paid less than $9 per week, and 74 per cent less than $12 per week.

At this juncture the cost of the absolute essentials of normal existence should be pointed out. From studies made in connection with San Francisco charitable institutions of the cost of *raw food,* it was found that the ordinary family must spend each day from 22 cents to 24 cents per person for the simplest food which will maintain health and strength.

Assuming an average family of five, the minimum cost of food totals about $35 a month. Investigation made by the commission revealed that the monthly rent of a decent house for five people was from $12 to $15. Thus the minimum cost of raw food and shelter alone totals about $50 in a month.

Recalling the wage statistics recently discussed, it was found that some workers had an earning capacity of even less than $50 a month, that many earned between $50 and $60. From these data it is apparent

[8]See Table VII at end of Section I.
[9]See Table VIII at end of Section I.
[10]See Table IX at end of Section I.
[11]See Table X at end of Section I.

that the problem of making both ends meet, even in the normal run of events, is still a real one in the family of the working man or woman in this state. In view of the fact that clothing, light and heat are essential for existence, this results in one of two things in the families of the poorer paid workers—either the married woman with children goes to work, or the family is materially undernourished.

If the ordinary living expenses are greatly enhanced by the necessity of buying costly medical or hospital care, it can be easily seen that the problem of existence becomes a serious one. The difficulty is, of course, doubled when the bread-winner himself is the sufferer, for in addition to the increased expenses of medical care and other attention required during illness, the family income is also simultaneously cut off.

Rate of Illness.

To what extent the family income is cut off because of sickness is, of course, a vital question in estimating the burden piled up by illness. A careful study of the records kept by fraternal orders[12] giving sick benefits and of the hospital experience of the German Hospital Association and the Southern Pacific[13] and Santa Fe railroads gave the commission some interesting information.

Tables made from this data indicate that an average of six days per worker are lost each year and from this, one aspect of the social loss due to illness can be figured. The records studied bear out the impression of common experience, however, that the average loss of earnings due to sickness while significant of our sickness rate, gives no picture of the individual experience of the workers.

Individual cases, it was found, vary from two weeks or less to more than twenty-six weeks, the greater majority being between one and two weeks. The protracted cases of the minority suffering serious illness, however, mean for these persons, out of work periods, of fifteen and twenty weeks and longer.

So, also, in the railroad hospital experience the average is found to be equally useless in estimating the hardships that illness brings to individual wage-workers. Although the hospital experience showed an average of from a day or a day and a half to half a day for each member of the association, what befell the individual sufferer is quite another story as the distribution table indicates.

Again,[14] records of the 1915 experience of over 1,200 working men in various establishments of the bay cities showed the low average loss of 2.9 working days per man for sickness. Yet the table of distribution

[12]Tables on fraternal data are found in chapter on Estimates of Cost.
[13]Found at end of Section I, Tables XI, XII, XIII, XIV, XV.
[14]Table XVI found at end of Section I.

of the days of illness gives the real picture of the hardship to the individuals who fell sick. Almost one-fourth of the total days of sickness were lost by ten men. One man lost almost a half year's earnings because of sickness. Two others were incapacitated for more than nine weeks.

The loss of earnings for two weeks or less might embarrass the poorer paid wage-earners, while a case of fifteen or twenty weeks illness could not but mean difficulty to all workers and practical disaster to many. Added to this loss is, of course, the expense of medical attention and hospital care.

Cost of Medical Attention and Other Care Required During Illness.

This brings us to the question of the price at which medical attention and other care required during illness can be purchased by the person of small income.

The charitable and semi-charitable furnishing of medical care should not be regarded, in a democratic community, as facilities available to the self-respecting worker.[15]

The published fee schedules of the San Francisco and Los Angeles County Medical Societies are interesting as a statement of what the organized medical fraternity consider the legitimate minimum charge to be collected for the various services rendered.

Adopted by the San Francisco County Medical Society March 8, 1898.

Medical Fee Bill.

For one ordinary visit	Not less than	$5 00
For one night visit (from 10 p.m. to 7 a.m.)	Not less than	10 00
(For additional patients in the same family, extra charge.)		
For the first consultation	Not less than	10 00
For each following consultation	Not less than	10 00
(Fees for consultation will be charged by the attending as well as the consulting physician.)		
For office advice and treatment in ordinary cases	Not less than	2 50
For microscopical examinations of the sputa and other dejecta	Not less than	5 00
For special examination	Not less than	10 00
For ordinary obstetrical cases	Not less than	25 00
(After the ninth day visits will be charged at ordinary rates.)		
For instrumental and extraordinary obstetrical cases	Not less than	50 00
For vaccination	Not less than	2 50
Detention, per hour	Not less than	10 00
For visits outside of the city limits, per hour, day or night	Not less than	10 00
(Including attendance upon court outside the city.)		
For administering anæsthetics	Not less than	10 00
For post-mortem examinations	Not less than	50 00
For post-mortem examinations, involving legal questions	Not less than	500 00
For examination of refraction of eyes	Not less than	20 00

[15] An account of the organized free service is contained in Section II under the heading of the "Burden Which Sickness of Workers and Their Families Imposes on the Public."

Surgical Fee Bill.

First Class.

CAPITAL OPERATIONS, OR OPERATIONS OF UNUSUAL DIFFICULTY OR GRAVITY

Such as: 1. Amputation of large limbs; 2. Compound fractures and dislocations of larger bones; 3. Exsection and resection of large joints and bones; 4. Ligation of large arteries; 5. Removal of large tumors; 6. Transfusion of blood; 7. Trephining of the cranium; 8. Cleft palate; 9. Operations for cataract, artificial pupil and enucleation of the eye; 10. Operation for stone in the bladder; 11. Strangulated hernia; 12. Vesico-vaginal and vesico-rectal fistula; 13. Fistula of the genital organs; 14. Difficult plastic operations; 15. All operations involving laparotomy, etc.; 16. Hysterectomy; 17. Mastoid operation, etc.—not less than.....$500 00

Second Class.

OPERATIONS OF SECONDARY IMPORTANCE

Such as: Simple fractures and dislocations of smaller bones; 2. Ligation of arteries of secondary size; 3. Radical cure of hydrocele; 4. Paracentesis of the thorax; 5. Removal of breasts; 6. Hare-lip; 7. Operations on urethral strictures; 8. Tracheotomy and intubation of the larynx; 9. Iridectomy; 10. Plastic operations of the eye, ear and nose; 11. Discission of cataract, etc.—not less than..... 200 00

Third Class.

MINOR OPERATIONS

Such as: 1. Amputations of fingers and toes; 2. Excisions of small cysts or tumors, not involving important organs; 3. Tenotomy; 4. Reducing hernia by taxis, where anæsthetics are administered, etc.; 5. Strabismus operations; 6. Operation for laceration of cervix uteri; 7. For reducing fractures or dislocations of fingers and toes; 8. Excision of tonsils or nasal polypi; 9. Suturing recent wounds; 10. Opening ordinary abscesses; 11. Tapping for hydrocele, etc.; 12. Tapping for ascites; 13. Pterygium operations; 14. Reducing fractures of the nose; 15. Paracentesis tympani; 16. Removal of foreign body from auditory meatus, etc.—not less than..... 50 00

The foregoing charges are for the performance of the operation only. For subsequent visits and office attendance, charges are to be made as in ordinary cases of disease, the fee being always in proportion to the time occupied and the trouble and responsibility incurred.

For operation and services not enumerated in the foregoing lists, charges will be made according to their nature and importance, at rates as nearly corresponding to the same as practicable.

While the medical profession recognizes the claims of charity upon its members, yet, inasmuch as the above list of charges is founded upon a just consideration of the services performed, it will be considered a duty on the part of the profession to conform thereto whenever the circumstances of the patient do not clearly forbid it.

All bills are considered due and payable immediately after the services are rendered.

Physicians, surgeons and specialists shall have the right to ask a retaining fee from their patients in extraordinary cases.

Los Angeles County Medical Association.

Adopted April 14, 1910.

Explanatory Note.

This fee bill is intended only as a basis of suggestion. Members of the Los Angeles County Medical Association are free to follow their own judgment in all individual cases, the items in this fee bill being merely intended to show in a general way the charges for such professonal medical and surgical services; services having a value, somewhat in proportion to the circumstances of the patient.

The following charges are for the performance of the operations only. For subsequent visits and office attendance, charges are to be made as in ordinary cases of

disease, the fee being always in proportion to the time occupied and the trouble and responsibility incurred.

For operations and services not enumerated in the following lists, charges will be made according to their nature and importance, at rates as nearly corresponding to the same as practicable.

While the medical profession recognizes the claims of charity upon its members, yet inasmuch as the following list of charges is founded upon a just consideration of the services performed, it will be considered a duty on the part of the profession to live up to the same whenever the circumstances of the patient do not clearly forbid it.

All bills are considered due and payable immediately after the services are rendered.

Physicians, surgeons and specialists shall have the right to ask a retaining fee from their patients in extraordinary cases.

Office Fees.

Advice and treatment in ordinary cases	$2 00	$5 00
Special examination and treatment	5 00	25 00
Surgical dressings	3 00	10 00
Letters of advice or written opinion	5 00	25 00
Examination as an expert in medico-legal cases	50 00	100 00
Gastric lavage	3 00	10 00
Examination for life insurance	5 00	15 00
Examination for lodge membership	2 00	5 00
Vaccination	2 00	------
Telephone advice	2 00	5 00
All venereal diseases	Maximum office fees in advance	

Visit Fees.

Ordinary visit	$3 00	$5 00
Night visit (10 p.m. to 7 a.m.)	5 00	10 00
Special examinations	5 00	25 00
Consultation (fee to be charged both by attending and consulting physician)	10 00	25 00
Medical emergencies, as asphyxiation and poisoning	10 00	100 00
Attendance at court as an expert, per hour or part of an hour	20 00	
Post-mortem examinations	50 00	250 00

General Surgery.

Administering a general anæsthetic	$5 00	$100 00
Assisting at a major operation, not less than		25 00
Minor operations, as repair of small wounds, incision of small abscesses, tapping hydrocele, paracentesis thoracis or abdominis, removal of small foreign bodies or tumors, or any similar minor operation requiring no general anæsthetic	15 00	100 00
Operations of secondary importance requiring general anæsthesia, as repair of larger wounds, incision of large abscesses, removal of foreign bodies or tumors not involving important structures	50 00	500 00
Major operations, as ligation of vessels in continuity aneurismorrhaphy, removal of foreign bodies or tumors involving important structures or any operation requiring unusual skill or care	250 00	5,000 00

Fractures.

Reduction and first dressing:		
Hand or foot	$25 00	$200 00
Forearm, arm or leg	100 00	500 00
Femur	250 00	1,000 00
Clavicle or scapula	100 00	500 00
Patella	100 00	1,000 00
Mandible or maxilla	100 00	500 00
Skull, spine or pelvis	250 00	2,500 00
Compound fractures or fractures requiring open operation	Double fees	

Abdomen.

Any operation involving laparotomy not less than		$150 00
Any operation upon the gastro-intestinal canal	$250 00	2,500 00
Resection of stomach or intestine	500 00	2,500 00
Operation for appendicitis or peritonitis	250 00	2,000 00
Any operation upon the liver, gall-bladder or ducts, spleen or pancreas	250 00	2,500 00
Hernia—radical operation inguinal, femoral, umbilical or ventral	250 00	1,500 00
Hernia—by taxis	10 00	100 00

Obstetrics.

Abortion or miscarriage	$25 00	$500 00
Uncomplicated labor	25 00	150 00
Twins	Double fees	
Abnormal presentation or position	50 00	500 00
Version	100 00	500 00
Instrumental delivery	50 00	250 00
Complicated labor, as eclampsia, manual removal of placenta, placenta previa, post-partum hemorrhage	50 00	500 00
Delivery of placenta only	25 00	75 00
Immediate repair of perineum or cervix	25 00	100 00
Cæsarean section or hebotomy	250 00	2,500 00

All visits except those of the 24 hours of the delivery shall be charged according to the rates given in this fee bill.

Ear, Nose and Throat.

Ordinary office visits	$2 00	$5 00
Special office examination or treatment	5 00	25 00
Foreign bodies—removal from ear	5 00	25 00
Foreign bodies—removal from throat	5 00	150 00
Foreign bodies—removal from trachea or bronchus	50 00	500 00
Adenoids—removal of	35 00	100 00
Tonsils—removal of	50 00	250 00
All operations on septum and turbinated bones	25 00	250 00
Resection of nasal septum	50 00	250 00
Trachæotomy, or intubation of the larynx	50 00	500 00
Operations upon accessory sinuses of the nose	50 00	1,500 00
Paracentesis tympani	10 00	25 00
Mastoid operations	150 00	1,500 00
Removal of the ear bones	75 00	250 00
Fracture of the nose	25 00	250 00

In contrast to these two schedules is the schedule published by the state compensation fund. These rates are the minimum fees paid physicians doing industrial accident work for the state fund. The schedule was constructed with the average income of one thousand dollars in mind, the compensation act affecting, for the most part, persons whose earning capacity was that or less.

FEE SCHEDULE.

State Compensation Insurance Fund.

First visit, including report and first examination, in injury not otherwise specified	$2 00
Surgical dressings (materials)	Specify costs
Mileage beyond city limits	50c day, 75c night, one way, per mile
Assisting at operation—	
Major	$10 00
Minor	5 00
Administering general anæsthetic	5 00
Testimony as to fact of injury	10 00

	Operation	Subsequent visits Hospital or Home	Office
Fractures.			
Reduction and first dressings—			
Nasal bones	$10 00	$1 50	$1 00
Hand or foot	5 00	1 50	1 00
Forearm—leg, 1 bone	10 00	1 50	1 00
2 bones	25 00	1 50	1 00
Femur or humerus	25 00	1 50	1 00
Clavicle or scapula	15 00	1 50	1 00
Patella	15 00	1 50	1 00
Mandible or maxilla	10 00	1 50	1 00
Pelvis	10 00	1 50	1 00
Ribs	5 00	1 50	1 00
For compound fractures or fractures involving joints	Add 50% to operation		
Dislocations.			
Easy reductions without anæsthesia or assistants	$5 00	$1 50	$1 00
Hip	10 00		
Sprains.			
Large joints, first treatment	$5 00	$1 50	$1 00
Small joints	2 00	1 50	1 00
Amputations.			
Finger or toe	$5 00	$1 50	$1 00
Two or more	10 00	1 50	1 00
Hand, wrist, forearm or arm	25 00	1 50	1 00
Shoulder disarticulation	40 00	1 50	1 00
Foot, ankle or leg	25 00	1 50	1 00
Knee or thigh	40 00	1 50	1 00
Hip disarticulation	75 00	1 50	1 00
Special Operations.			
Trephining or resection of skull	$50 00	$1 50	$1 00
Laminectomy	75 00	1 50	1 00
Hernia, radical operation	30 00	1 50	1 00
Hernia—by taxis—reduction and applying truss	5 00	1 50	1 00
Paracentesis, thoracis or pericardii	5 00	1 50	1 00
Tendoplasty	25 00	1 50	1 00
Catherization of urethra	2 50		
Foreign Bodies.			
Removal from conjuctiva (one or more)	$2 00		
Removal from cornea	3 00		
Enucleation of the eye	30 00	$1 50	$1 00
Minor Operations.			
Repair of small wounds (to 2½ inches)	$2 50	$1 50	$1 00
Repair of large wounds (over 2½ inches)	5 00	1 50	1 00
Contusions, simple	2 00	1 50	1 00
Contusions, extensive (several in different parts of body)	4 00	1 50	1 00
Abrasions and burns—			
Simple	2 00	1 50	1 00
Extensive, depending upon severity of case	----	----	----
Abscess—incision	2 50	1 50	1 00
Removal of small foreign bodies	2 50	1 50	1 00

Hospital Care.

Hospital care adds greatly to the expense of serious illness. Service is fairly uniformly rated, the customary charges being $15 to $17.50 per week for ward accommodation and from $25 to $35 per week for private room. This charge does not include laundry, which is usually $5 per week, nor the cost of operating room, ordinarily $10, nor drugs and surgical appliances.

Nursing.

Nursing adds another item. General nursing is included in ward service of hospitals but a special nurse means additional expense. The following schedule of fees is published by the Nurses Central Directory.

SCHEDULE OF FEES (Not obligatory).

1. For ordinary cases: Women $25.00 per week, $4.00 per day for a fraction of a week. Men $30.00 per week, $5.00 per day for a fraction of a week.
2. One-day, two-day or three-day cases, $5.00 per day.
3. For contagious and nervous cases, $30.00 per week, or $5.00 per day for fraction of a week.
4. Insane, alcoholic and quarantine cases, $5.00 per day.
5. Assisting at operation, $5.00 to $10.00.
6. Obstetrical cases, $30.00 per week, payable from date of engagement.
7. When one nurse has two patients, $5.00 per week extra.
8. Visiting nurses, $1.50 for visit of one hour or less; $2.00 after 6 o'clock p.m.
9. Agreement for charges in special cases should be made before the nurse takes charge of a case.
10. Board included in all cases except visiting nursing.
11. Male nurses: For ordinary cases, $5.00 per day for 12-hour duty; $6.00 for 24-hour duty.

Dental Care.

The following schedule is in use in the industrial town of South San Francisco: Crown work, $8.00; silver filling, $2.00 to $1.50; extraction, $1.00, with gas $1.50 and up; miscellaneous attention, about $2.00; plate work averages $15.00. Investigations of the experience of individual wage earners showed that many workers are paying according to higher standards.

It is naturally impossible to know the varying fees regularly charged and collected in all instances by physicians in their practice among persons of small income. A vast amount of charitable and semi-charitable medical service is dispensed each year. The fee schedules printed have no binding force as law. Conferences with representative physicians disclosed the standard of 10 per cent of annual income as the basis used by many of the profession in making charges for operations. Field studies in the poorer section of San Francisco showed cases receiving medical care at from $1 to $2.50 a visit, corresponding more nearly to the schedule of the state fund than those of the county medical societies. That many men and women of small earning capacity attempt to pay the cost of surgical and medical care according to the standards of the county medical societies, was evidenced in investigations discussed in other parts of this chapter.

Even assuming that a majority of the cases are charged according to these lower rates, however, there can be no doubt that a five weeks' illness (the average duration of a case) would at least endanger the financial situation of most families. Not the least result of the situation must be a tendency to minimize the amount of medical attention secured, thereby courting serious illness.

A discussion of the actual experience of some of the women workers of the state naturally follows these generalizations.

Experience of 1,000 Women Wage Earners.

The records of one year's expenditures of 600 individual working women in San Francisco and Los Angeles, collected by the Industrial Welfare Commission, were studied from the standpoint of the percentage of their income absorbed by the purchase of medical, surgical and dental care. These records were made out by department store and factory employees under the direction of special agents of the Industrial Welfare Commission.

The records of these women were classified according to their earning capacity and occupation and indicate the amount and percentage spent for dental and medical care by the various groups.[16] The percentage of income expended by each of the three groups for medical and dental care is about 4 per cent. A similar amount contributed by a group of women in countries possessing health insurance systems guarantees a money payment of at least half wages, medical, surgical and hospital care, a special maternity benefit in case of childbirth and a cash benefit to cover funeral expenses.

The fact of greatest significance to be gathered from a study of these 600 cases is not, however, the heavy burden which necessary medical and dental care is imposing upon the group income of these wage earning women. Important as that fact is, the fact of greatest significance is the unequal way in which this burden is distributed. About half (more than 50 per cent) of the total amount expended by the entire group for doctor and medicine was paid out by 21 of their number, while 301, or over 50 per cent, suffered no expense whatever. Of the four women incurring medical bills of more than $300 only one had an earning capacity of more than $12 per week. The remaining three were earning from $6 to $12 a week. Eight of the seventeen who paid between $100 and $300 for medical assistance received less than $12 a week.

As might be expected, the dental bills were more evenly distributed. In the event of distress with the teeth there is not so available the alternative of home remedies as in the case of other illness. An unevenness of distribution of the total cost is, nevertheless, still noticeable. Four women incurred bills of over $100 and 18 paid amounts varying between $50 and $100, while 398 escaped altogether.

This study of the Industrial Welfare Commission data was supplemented by a first hand investigation conducted by agents of the Social Insurance Commission among over 500 organized trade women in San Francisco. Through the courtesy and cooperation of the Waitresses' Union and Laundryworkers' Union, the commission was enabled to obtain from their members accurate and reliable records of their 1915

[16]Table XVII found at end of section.

experience. The experience of the laundresses and waitresses was analyzed in the same way. Since the waitresses employed through their union a physician who was under contract to attend members in all cases except those involving serious illness or hospital care, it was thought best to separate the records according to trade.

The 251 laundresses as a group[17] paid out 5.1 per cent of their aggregate earnings for medical (including drugs and hospital treatment) and dental care. This 5 per cent amounted to $5,738. Almost half this sum, $2,291,[18] was expended by eleven women, only one of whom had an earning capacity of over $12 per week.

It should be noted that the bulk of cases under observation had an actual income of from $350 to $500 a year. Over 80 per cent of the total amount of dental and medical bills had to be met by persons earning less than $500 a year. Only seven were members of organizations giving protection during illness by providing either money or medical benefits. On being questioned, their invariable explanation for nonmembership was that "it was expensive, they couldn't afford it and they probably would not get sick if they did belong."

To ascertain whether the expenses incurred by these women could be passed on to supporting relatives, questions on this subject were included in the investigation blanks. The following facts resulted:

(1) 191 of the women (76.1 per cent) were either absolutely independent, or helping to support or completely supporting dependents.

(2) 54 (21.5 per cent) were living at home in what they termed an "interdependent position." By this is meant that all the working members of the family placed their earnings into a common fund upon which they drew when necessary.

(3) Only six (2.4 per cent) of the total number were receiving aid from their families and contributing nothing.

As these 251 cases were selected at random, they may be safely considered fairly typical of the trade. There can be no doubt that except for a negligible percentage, the women working in the laundry industry, at least, do so either because it is necessary for their own support, or because their earnings are needed to eke out the family income. The question of "pin money," so frequently raised at the discussion of the wages and expenses of working women, can have no place in the consideration of the economic problem of these wage earners.

The records of the 264 waitresses[19] differ in several particulars. Only 3.9 per cent of their aggregate earnings were absorbed by medical and dental bills in contrast to the 5.1 per cent paid out by the group of laundry workers. The difference is mainly due to a reduced expenditure for physicians' services, normally to be expected in view of

[17]Table XVIII.
[18]See Table XX at end of Section I.
[19]See Table XIX at end of Section I.

the contract doctor employed by the Waitresses' Union. The extremely large amount paid for dental services was attributed by the members of the trade who were questioned in this regard to the peculiar demands of their occupation. As one tersely put it "A waitress simply can not afford to let her teeth go to pieces." Personal appearance is part of the stock in trade of the waitress and neglect of the teeth reduces the likelihood of obtaining a good position.

Barring these variances which are explained by the actually different situations of the women in the two trades, the records of the waitresses repeat the story already told. Seven women paid over one-third of the aggregate bills. Twenty-five were responsible for practically two-thirds. One hundred forty escaped all expense on this score.

Only eight of the twenty-five who paid more than $50, had an earning capacity of over $12 a week. One woman who could not in a whole year earn more than $550 had to face a bill of $430 because of one serious illness. Eight women found it necessary to go as charity patients to the county hospital.

All these women were medically insured to the extent that they were entitled to the services of the union doctor. Seven, only, carried other protection, four being members of a lodge giving a $5 a week sick benefit and three being members of hospital associations which entitled them to limited hospital care and free drugs as well as medical attendance for specified diseases.

Almost half (48 per cent) of the waitresses proved to be either self supporting or totally or partially supporting dependents in addition. Almost half (49 per cent) reported themselves as interdependents, a large percentage of whom were found to be married women, at work because the husband's wages proved insufficient to maintain the family with a decent standard. Only five (3 per cent) were receiving assistance from relatives and contributing nothing.

The "pin money" explanation of wage working women seems as inapplicable in the trade of the waitresses as it proved to be in the laundry industry. For the most part at least their expenses had to be met out of their own earnings and in the event of loss of income and increased bills during illness, the question of meeting the cost of living assumed serious proportions, and the danger of becoming a dependent upon private or public charity was not far in the background.

Summing up, then, the facts that come to light in the study of one year's actual experience of a thousand wage earning women of this state are as follows: They spent in the aggregate approximately 4 per cent of their combined earnings for medical and dental care. This percentage has proved more than sufficient in the countries providing health insurance for its workers, to guarantee a substantial part of wages and

other special benefits in addition to all necessary medical, surgical and hospital care to wage earners incapacitated because of illness.

This average of 4 per cent which was the group loss was spread most unevenly throughout their number. A substantial number of the group escaped expense altogether. A very small number incurred the bulk of the bills, the burden mounting as high as 50 per cent or 60 per cent of the individual annual income in some cases. Less than 2 per cent were insured in any way against the losses of illness by membership in lodges or hospital associations, the reasons being the low earning capacity of the women (the bulk of them receiving less than $500 a year), the comparative high cost of even meager protection, the fact that illness is always unforeseen and uncertain, and the average individual, to whom a small amount of money means a great deal, is inclined to "take a chance."

The number of these women who worked for any reason other than necessity was negligible. Lapses of income and expenses incurred by them had to be accounted for out of their own earnings, and in many cases persons dependent upon them shared their misfortunes.

Clinic Study.

As the free clinic represents the only alternative to purchase by private contract in the field of medical service, at least in so far as specialist treatment is concerned, it was deemed worth while to investigate the economic status of the persons applying for attention at the five leading clinics located in San Francisco and Los Angeles.

The University of California clinics in San Francisco and Los Angeles, the Stanford Medical School clinic and the Polyclinic in San Francisco, and the University of Southern California clinic in Los Angeles were selected for study. During the months of June and July over 5,000 patients were interviewed by agents of the commission and their "social histories" recorded. As 300 or more of the cards were so lacking in essential information as not to be of any use, the study made was made of a total of 4,738 cases.

The "free clinic" or dispensary in California has developed within the last two years in two general directions—toward greater specialization of work and toward increased equipment for a greater number of patients. The applications for treatment are growing at a rate with which the clinics have found it impossible to keep pace. A detailed description of the equipment, cost of maintenance and work of the clinics will be found in Chapter II.

Looking at the records from the standpoint of family income, it is found that among 2,587 patients applying at San Francisco clinics, only 53 were dependent upon charity, public or private, for their support.

In 29 instances the wage earner had been out of employment for more than a year and so there was a state of practical dependency on some outside source, while in 31 more cases the wage earner had not been employed for periods varying between six months and a year. Sixty-five were temporarily out of a position and 12 reported very unsteady employment. In the remaining cases there were employed wage earners with a fairly steady income. Thus, in only 190 cases, or about 7 per cent of the total number considered could the application for free treatment be attributed to the fact of dependency or unemployment. A classification of the other 93 per cent was made according to income and divided into males, females and children to show the number of each class of patients under observation.

In over half of the total San Francisco cases the income of the family was less than $16 per week.[20] Disregarding the charity and unemployment cases, about 80 per cent of the families had an income of less than $25 a week.

Comparing these figures with the Los Angeles records, it is found that 40 were dependent on public and private charity; in 50 cases there had been unemployment for more than a year; in 26 for periods varying between six months and a year. One hundred thirty-two were temporarily out of a position and 31 reported very unsteady employment. Thus 12 per cent of the Los Angeles cases could be attributed to dependency or difficulty with employment.

In 61 per cent of the Los Angeles cases[21] the family income was less than $16 a week and disregarding charity and unemployment cases over 80 per cent of the families had an income of less than $25 a week, practically repeating the story of the San Francisco histories.

Grouping these same cases according to the wage of the principal wage earners, the resulting picture is but slightly different. In view of the fact that 435 of the total families have more than one breadwinner,[22] it would be expected that classifying according to wages of main breadwinner would throw fewer persons into higher money level groups than the grouping according to family income. On examination of the card records the fact that this does not so prove is explained thus: The effect of contributions of other earners in the family on the family income is neutralized by the lowering effect which irregularity of employment has upon the earnings of the principal wage earner. It is found that in half of the families the wage of the principal earner is less than $16 a week and in over 67 per cent the chief breadwinner had an earning capacity of less than $25.

[20]Table XXI being based on family income rather than wage of principal breadwinner.

[21]Table XXI, Section I.

[22]Table XXII, at end of Section I.

In by far the greatest number of families (almost 84 per cent of those about whom this data was recorded) there was but one wage earner,* and in the majority of cases there were from one to four dependents. In more than 1,100 families (including miscellaneous cases) the applicant for medical aid had no one dependent upon him for support.

Thus it can be seen that the applicants to the free clinics are not from the abnormally large or unusual family in any sense, but from the normal family of average size as indicated by our general population statistics. Nor are the applicants from the family with an unemployed breadwinner, but from the family with a normally steady and comparatively small income.

A classification of the combined Los Angeles and San Francisco cases into 15 occupational groups[23] shows that the two largest groups are the "common laborer" and "domestic and personal service," two of the most poorly paid occupations. "Skilled trades, mechanical," follows next, and then with approximately the same membership the groups of "building trades," "garment manufacturers," "clerical employees" and "petty commerce."

Further refinements of this clinic data may be easily gleaned from the tables by those interested in pursuing the subject further. It suffices to call attention to these more important facts and to comment upon them.

This clinic investigation throws light on the specific problem which is the subject of this chapter—the "burden that illness places upon the wage earner." The fact that an ever increasing number of self-supporting wage earners of small income not otherwise dependent in any sense are seeking medical assistance at the free clinics despite the instinctive dislike felt by self-respecting working people for dispensation of any sort which spells charity, despite the fact that they are made plainly to feel that such medical facilities are only for those who can not afford to buy, is alarmingly significant. It would be futile to ascribe such seeking to a total lack of self-respect and an endeavor to get something for nothing on the part of these individuals. The number of them alone would be sufficient to refute such a conclusion. Aside from this point, however, the interviewing and observation of 1,000 cases would convince any one that there is a far more reaching and direct cause responsible. The growing attendance at the free clinics is accounted for by the fact that they can there get from physicians and surgeons, whom they know to be men and women of reputation, specialist care which they can not possibly afford to purchase. There is no reason to suppose that if there were a way by which they might buy this same attention for a small price within their means we should still

*See Table XXIII at end of section.
[23]Table XXIV at end of Section I.

find the bulk of them frequenting the "free clinic." Defensible as their application to the free clinic under present circumstances is, however, the fact remains that a large and increasing group of persons not in any sense destitute are each year the recipients of medical charity. This situation is not a healthy one in a democratic community, nor does it bespeak a sensible organization of medical aid that physicians should give medical attention to a large group of independent self-supporting individuals for no remuneration.

Analysis of Charity Cases.

To get an exact picture of the part played by illness in the dependency problem of California, the records of over 5,000 families recently assisted by the charitable organizations of San Francisco and Los Angeles were analyzed from the standpoint of the causes for asking relief.

The innumerable reasons driving persons to seek charitable assistance were first classified under five broad headings—illness, other disability, absence of male breadwinner, unemployment and low earning capacity and miscellaneous causes. A more detailed analysis of the causes into sixteen classes was also made, but for the purposes of this discussion the broader classification is sufficiently illustrative and far less confusing to the average reader.

Often two difficulties equally contributed to the destitution of the family. To be exact, in 1,422 families, two of the five causes[24] in various combinations apparently were equally to blame for the distress, while in 3,874 cases a single cause only forced the persons concerned to become recipients of charity. The diagram on the opposite page shows the relative frequency of these causes in as concise a form as possible.

It will be seen by observation of the diagram that illness combined with one of the other factors is a moving cause in 2,652 cases, or 52 per cent of all the cases. Low earning capacity and unemployment is the next most frequent reason for the appeal to charity. Other physical and mental disability ranks third, absence of the wage earner fourth, while miscellaneous difficulties, impossible of other classification, are responsible factors in but 2 per cent of the total. Evidently then, considering all the cases under observation, illness is the most frequently occurring cause for seeking charitable relief.

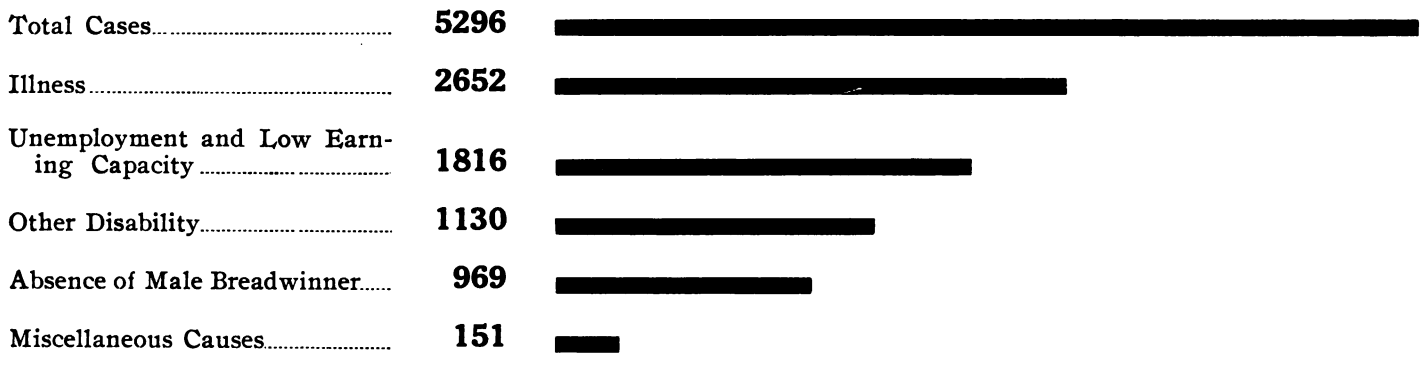
Of the 3,874 "single cause" cases, illness is again found to be the most frequent factor.[25]

It is worth while calling attention to the number of cases in which illness of dependents helped to render the family destitute. The statement is often heard that illness does not really create serious difficulty in California so long as the wage earner himself is well and able to work.

[24] See Table XXV at end of Section I.
[25] See Table XXVI at end of Section I.

Diagram Showing Frequency of Occurrence—Primary Causes of Destitution

San Francisco and Los Angeles Charity Cases



As we find illness of members of the family solely responsible for destitution in 234 of these families, it is evident that this statement is untrue. To be sure, we should expect circumstances to be worse in the event of the wage earner's illness than when the dependents are the sufferers, as the calamity is then a double one, and the statistics of these cases bear out this expectation. Illness of the wage earner is the direct and sole cause of 911 cases, while illness of dependents is solely responsible for 234.

The recurrence of pregnancy as a cause for seeking public aid was a striking revelation. In almost one-fifth of the cases in which illness is found, pregnancy of the woman was the chief reason for the application for help. Medical attention and financial assistance were both needed as the woman was unable, because of her temporary physical handicap, to do her part of the family work.

Nothing could more clearly bring out the absolute necessity of special provision for women of wage-earning families at the time of childbirth. Lack of medical attention and overstrain at such a time endangers the health of the next generation, and at the same time creates additional problems through the impairment of the physical well-being of the mother.

The part played by tuberculosis in producing destitution is commonly recognized as tremendous. It is a malady apt to strike the young even more than the old and its cure is so costly as to be prohibited to the average worker. The tubercular case is the most hopeless of all those presenting themselves to charitable organizations. Expensive sanitarium care of long duration is frequently necessary, if the case is to be saved, and the limitations of the resources of "charity" make such treatment, as a general thing, impossible. In over 11 per cent of all the sickness cases applying for help tuberculosis was the specific disease.

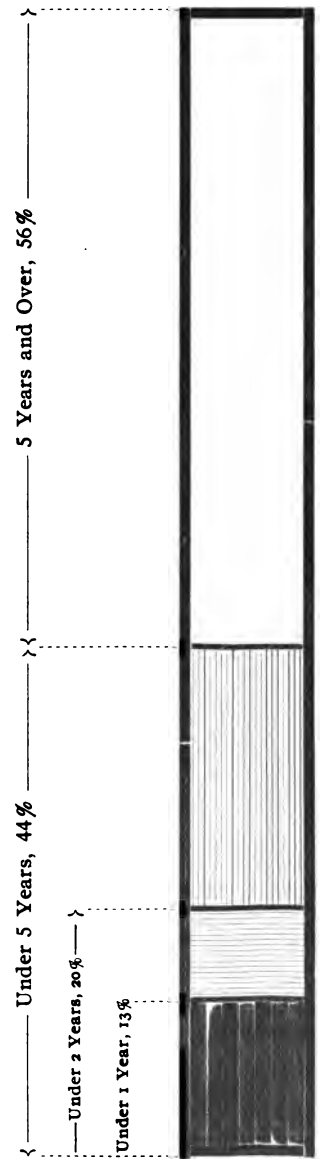
Anything contemplated as a solution of sickness problems in California would be inadequate unless it involved some special provision for tuberculosis sufferers.

In view of the common impression that tuberculosis in California is, to a great extent, an "imported problem" and not a "home problem," the commission thought it best to make a careful study of this aspect of the California tuberculosis situation. As Los Angeles County probably receives more tubercular immigrants than any other county of the state, it was chosen for investigation. The reported cases involving wage earners and their families for 1913, 1914 and 1915 were analyzed from the standpoint of length of residence in California.[26] This analysis is shown in the following diagram:

[26]See Table XXVII, at end of Section I.

Tuberculosis Cases—Length of Residence in California

Wage Earners and Wage Earners' Families



It is safe to say that if more than 56 per cent of the Los Angeles tuberculosis wage earners have been residents of the state for a period of five years or more, the proportion of tubercular persons for the whole state having such a length of residence is much greater.

The very close margin of safety that the present increased cost of living leaves the families of poorer paid wage earners is emphasized by an analysis of the destitute families according to the number of breadwinners and dependents.* There was a time when the majority of applicants for charity were either from the very large families of at least eight or ten, or families whose breadwinner was lacking. Evidently this time has passed, for of these destitute families applying for help, 75 per cent had three children of less, and only 8 per cent more than six. In over 80 per cent of the families there were two parents. Clearly the growing destitution in California can not be ascribed to abnormal family conditions.

The experience of about five hundred of the families aided by public charity was further investigated. A statistical record of the expenses they incurred in securing medical and dental aid in the year just preceding their application for help is shown as follows:

Charity Cases.

Cost of Medical, Hospital and Dental Service in Year 1915.

Five hundred and thirteen families were questioned.
Seventy-seven families received no medical, hospital or dental treatment.
Four hundred and thirty-six families received some medical, hospital or dental treatment.

Of this 436—
91 (or 25 per cent) received wholly free treatment.
345 (or 75 per cent) paid for treatment.

Of this 345—

186 families paid bills under	$50 00			
33 families paid bills between	50 00—	$75 00		
17 families paid bills between	75 00—	100 00		
25 families paid bills between	100 00—	200 00,	totaling	$3,148 25
13 families paid bills between	200 00—	300 00,	totaling	3,069 75
9 families paid bills between	300 00—	400 00,	totaling	3,000 00
3 families paid bills between	400 00—	500 00,	totaling	1,270 00
8 families paid bills over	500 00		totaling	8,465 70

51 families, cost of treatment unknown.

Of the 345 who paid for treatment, 123 families, or 36 per cent, received free treatment in addition.

Notes on above tables:

47 families were still in debt for services.
Of these, 37 were in debt to the amount of $3,956.20.
20 families were helped by friends or relatives.
For 15 of these, bills amounting to $899.25 were paid.
4 families were helped by lodge benefits.

*See Table XXVIII at end of section.

Considering cases of tuberculosis only, in the above table, the following facts are shown:

44 families received tuberculosis treatment.
Of these—
25 families (or 57 per cent) received all free treatment.
18 families (or 41 per cent) paid a total of $1,908.00.
Of these 18 families—
8 also received free treatment.
1 family, cost of treatment unknown.

Similarly isolating the maternity and confinement cases, it is found:

73 families received maternity benefit.
Of these—
21 families (or 28.8 per cent) received all free treatment.
48 families (or 66 per cent) paid a total of $1,389.00.
Of these 48 families—
3 also received free treatment.
4 families, cost of treatment unknown.

These destitute families were by no means all from the "small income" group who live on the edge of economic dependency. In quite a number of cases, the breadwinner had been earning well above the average wage and the family had accumulated savings. These savings were eaten up during periods of illness, by general living expenses and by extra expenses entailed in medical and hospital bills.

Of the eight families who received bills amounting to more than $500 in 1915, only one family incurred a debt. The other seven met this expense out of savings. After spending everything they had accumulated, they were forced to ask for public assistance.

One woman of forty-eight years, who had been for twenty-five years a teacher, spent in 1915 for a series of operations all that she had laid by in her years of work—over $3,000. It so happened that the operations proved unsuccessful and she found herself in October, 1916, penniless, incapacitated for work and dependent upon charity for the means of mere subsistence.

A man of sixty-seven, no longer able to hold a job, spent his $900 savings to pay his physician. As a consequence, his wife entered domestic service. She was unable to earn sufficient to support them and public aid was necessary.

An investigation of the "sickness experience" of these families in previous years merely emphasized the same facts. Most of the persons who are temporarily or permanently dependent upon charity are, to begin with, completely self-supporting people. They secure a private physician and go to a private hospital when ill. But if a long continued illness strikes either the wage earner or a member of his family, it is merely a question of time before they are reduced to the necessity of asking charitable aid. For the better paid wage earner, the period of

grace is longer, as there are often considerable savings. For the poorer paid wage earner, the period is decidedly short. The first step is often a request for medical charity, but when the wage earner is the sick individual, general assistance for buying food and shelter is soon necessary.

Thus among the families under observation, there was found an instance of a laborer earning $15 a week, who paid $900 in a period of about four years for medical attention for his wife. The following year she was in need of an operation and, her lesson learned, she went to the county hospital, no further charity being necessary. When, however, a little later the man himself fell ill, he was in a short time forced to ask help from public charity in order to purchase food and pay the cost of shelter.

Again, a blacksmith earning $12 a week, with which to support a wife and two children, paid in 1915 over $100 for medical treatment for his wife. Hospital treatment becoming necessary, she went to the county hospital to save further expense. At this juncture, the man himself suffered an accident and after a protracted illness he found himself with a medical bill of $200 and absolutely no funds. The result was an application to the free clinic for further medical aid and an appeal to public charity for financial assistance to tide him over until he could return to work.

Cases of this sort could be cited in any number and would serve but to repeat the story. In over one hundred instances, several thousand dollars had been actually paid for the purchase of medical aid and hospital care by families, who were at least reduced to the necessity of asking for public assistance.

Summary.

From the investigations so far discussed, the following facts stand out:

The majority of wage earners, having the average family of three or four dependents, find their earnings consumed in meeting ever increasing cost of the necessities of existence. The cost of medical attention and hospital care in California is particularly heavy because of high medical standards and because most of the hospitals are run on a commercial basis, rather than on a nonprofit basis as in eastern states.

The majority of these wage earners can not save a sufficient amount from their earnings to provide for the extra expenses made necessary by either their own illness or the illness of their dependents. Even those of better incomes who can and do accumulate substantial savings are often unable to meet the heavy bills of protracted illness. While a comparatively low (average) rate of sickness is indicated by California investigations, this low average is accounted for by the fact that many escape illness altogether. The individual whom serious illness

strikes is as badly off as in communities having a higher sickness rate. Cases lasting fifteen and twenty-five weeks are not uncommon.

The burden of serious illness is sending married women with children to work. It is causing many honest and conscientious wage workers to go without sufficient food and clothing. It is forcing an increasing number of families to become recipients of medical and general charity.

In short, the burden that protracted illness places upon the individual wage earner is intolerable. It threatens his economic independence and too often for social weal, it makes good the threat.

TABLE I. Annual Fluctuation of the Number of Employees in California Industries.

	No. of establishments	Maximum	Minimum	Fluctuation	Per cent of fluctuation	Average employed	Average unemployed	Per cent of loss of time
1. By industry as a whole[1]	------	68,838	47,156	21,682	31.5	57,956	10,882	15.8
2. By separate establishments[1]	------	83,327	47,667	35,660	42.8	66,132	17,195	20.6
3. Separate establishments[2] (other industries)	------	15,893	7,854	8,039	50.6	10,685	5,208	32.8

[1]Manufacturing establishments.
[2]No data obtainable for these industries as a whole.
NOTE.—Under the category "industry as a whole" the monthly fluctuations in the number of employees were taken as a total for each industry from the sixteenth biennial report of the Bureau of Labor Statistics of California. Under "separate establishments" the monthly fluctuations in the individual establishments in each industry were considered and the total of the individual maxima and minima taken. This was done under the principle that there is a very small movement of men from one establishment to another even within the same industry. Thus the two average per cents in numbers 1 and 2 represent the minimum and maximum per cents of loss of time, the true average being between them.

TABLE III.—Wages in Manufacturing.

(Sixteenth Biennial Report of the Bureau of Labor Statistics of the State of California. 1913-1914.)

Males.

Weekly wage rate	18 years of age and over			Under 18 years of age			Total		
	No.	Per cent	Cumulative per cent	No.	Per cent	Cumulative per cent	No.	Per cent	Cumulative per cent
Under $4	17	.03	.03	13	1.01	1.01	30	.05	.05
$4 to $4.99	35	.06	.08	62	4.86	5.87	97	.17	.22
$5 to $5.99	99	.17	.26	136	10.64	16.51	235	.41	.63
$6 to $6.99	294	.52	.88	276	21.58	38.09	570	.99	1.62
$7 to $7.99	440	.78	1.66	242	18.92	57.01	682	1.18	2.80
$8 to $8.99	540	.96	2.62	126	9.85	66.86	666	1.15	3.95
$9 to $9.99	1,089	1.93	4.55	174	13.6	80.46	1,263	2.19	6.14
$10 to $10.99	2,251	3.99	8.54	100	7.8	88.26	2,351	4.08	10.22
$11 to $11.99	1,362	2.43	10.79	34	2.67	90.93	1,396	2.42	12.64
$12 to $12.99	5,746	10.19	21.16	65	5.08	96.01	5,811	10.08	22.72
$13 to $13.99	5,198	9.23	30.39	27	2.11	98.12	5,225	9.06	31.78
$14 to $14.99	3,008	5.34	36.73	9	.70	98.82	3,017	5.23	37.01
$15 to $17.99	12,671	22.48	59.21	12	.94	99.76	12,683	22.02	59.03
$18 to $20.99	7,897	14.00	73.21	2	.16	99.92	7,899	13.70	72.73
$21 to $24.99	9,078	16.1	89.31	1	.08	100.00	9,079	15.75	88.48
$25 and over	6,644	11.79	100.00	------	------	------	6,644	11.52	100.00
Totals	56,369	100.00	------	1,279	100.00	------	57,648	100.00	------

TABLE II.—Summary of Unemployment Investigation in San Francisco

Building Trades.

689 men gave information.
643 men lost time during 1915.
11,663 weeks lost by these 643 men.
18.14 weeks average time lost for 643 men.
16.93 weeks average time lost for 689 men.

Mechanical Trades.

541 men gave information.
413 men lost time during 1915.
6,670 weeks lost by the 413 men.
16.15 weeks average time lost by 413 men.
12.51 weeks average time lost by 541 men.

Laborers.

277 men gave information.
258 men lost time during 1915.
4,757 weeks lost by the 258 men.
18.44 weeks average time lost by 258 men.
17.17 weeks average time lost by 277 men.

Manufacturers.

41 men gave information.
35 lost time during 1915.
393 weeks lost by 35 men.
11.23 weeks average time lost by 35 men.
9.59 weeks average time lost by 41 men.

Transportation.

100 men gave information.
74 men lost time during 1915.
1131 weeks lost by the 74 men.
15.28 weeks average time lost by 74 men.
11.31 weeks average time lost by 100 men.

Personal Service.

279 men gave information.
211 men lost time during 1915.
3,688 weeks lost by 211 men.
17.48 weeks average time lost by 211 men.
13.22 weeks average time lost by 279 men.

All Other Occupations.

61 men gave information.
48 men lost time during 1915.
718 weeks lost by the 48 men.
14.96 weeks average time lost by 48 men.
11.77 weeks average time lost by 61 men.

Total.

Total of 1,988 men gave information.
1,682 men lost time during 1915.
29,020 weeks lost by 1,682 men.
17.25 weeks average time lost by 1,682 men.
14.60 weeks average time lost by 1,988 men.

TABLE IV. Rates of Wages for Labor Organizations in California, June, 1916.
(Compiled from Data of the Bureau of Labor Statistics.)

Transportation.

Wage rate	San Francisco and the North			Los Angeles and the South			Valley towns, number	Total		
	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent		Number	Per cent	Cumulative per cent
$10.00 to $12.49	20	.21	.21					20	.20	.20
$12.50 to $14.99	5,470	57.61	57.82					5,470	52.25	52.45
$15.00 to $17.49	62	.65	58.47	161	32.66	32.66	100	323	3.08	55.33
$17.50 to $19.99	117	1.23	59.70	26	5.27	37.93		143	1.36	56.89
$20.00 to $22.49	1,907	20.09	79.79				238	2,145	20.49	77.38
$22.50 to $24.99	1,150	12.11	91.90					1,150	10.99	88.37
$25.00 to $29.99	300	3.16	95.06	290	58.23	96.75	144	734	7.01	95.38
$30.00 to $34.99	468	4.94	100					468	4.47	99.85
$35.00 to $39.99				16	3.25	100		16	.15	100
Totals	9,494	100		493	100		482	10,469	100	

TABLE V. Rates of Wages for Labor Organizations in California, June, 1916.
(Compiled from Data of the Bureau of Labor Statistics.)

Restaurants, Mercantile, Theaters.

Less than $10.00							78	78	1.04	1.04
$10.00 to $12.49	2,150	43.45	43.45	294	20.23	20.23	259	2,703	35.95	36.99
$12.50 to $14.99	29	.59	44.04	79	5.44	25.67	110	218	2.90	39.89
$15.00 to $17.49	96	1.94	45.98	57	3.92	29.59	60	213	2.83	42.72
$17.50 to $19.99	1,961	39.63	85.61	61	4.19	33.78	116	2,138	28.43	71.15
$20.00 to $22.49	557	10.85	96.46	45	3.10	36.88	290	872	11.60	82.75
$22.50 to $24.99				179	12.33	49.21	205	384	5.11	87.86
$25.00 to $29.99	175	3.54	100	738	50.79	100		913	12.14	100
Totals	4,948	100		1,453	100		1,118	7,519	100	

TABLE VI. Rates of Wages for Labor Organizations in California, June, 1916.
(Compiled from Data of the Bureau of Labor Statistics.)

Building Trades—Males.

Wage rate	San Francisco and the North			Los Angeles and the South			Valley towns, number	Total		
	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent		Number	Per cent	Cumulative per cent
$12.50 to $14.99				30	.66	.66		30	.15	.15
$15.00 to $17.49	649	5.12	5.12	260	5.77	6.43	4	913	4.61	4.76
$17.50 to $19.99	524	4.13	9.25	15	.33	6.76		539	2.79	7.55
$20.00 to $22.49	407	3.21	12.46	1,049	23.28	30.04	44	1,500	7.57	15.12
$22.50 to $24.99	2,400	18.93	31.39	2,440	54.14	84.18	672	5,512	27.89	43.01
$25.00 to $29.99	4,608	36.35	67.74	158	3.51	87.69	1,612	6,378	32.27	75.28
$30.00 to $34.99	3,046	24.03	91.79	525	11.65	99.34	223	3,794	19.19	94.49
$35.00 to $39.99	793	6.26	98.03				23	816	4.12	98.59
$40.00 and over	250	1.97	100	30	.66	100		280	1.41	100
Totals	12,677	100		4,507	100		2,578	19,762	100	

TABLE VII. Women's Wages, Manufacturing.

Weekly wage rate	18 years of age and over			Under 18 years of age			Total		
	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent
Under $4.00	108	1.38	1.38	8	1.43	1.43	116	1.38	1.38
$4.00 to $4.99	93	1.19	2.57	46	8.20	9.63	139	1.66	3.04
$5.00 to $5.99	349	4.46	7.03	106	18.89	28.52	455	5.43	8.47
$6.00 to $6.99	1,094	14	21.03	202	36.01	64.53	1,296	15.47	23.94
$7.00 to $7.99	1,197	15.31	36.34	90	16.04	80.57	1,287	15.36	39.30
$8.00 to $8.99	1,007	12.88	49.22	50	8.91	89.48	1,057	12.62	51.92
$9.00 to $9.99	1,098	14.05	63.27	20	3.56	93.04	1,118	13.34	65.26
$10.00 to $10.99	949	12.14	75.41	21	3.74	96.78	970	11.58	76.84
$11.00 to $11.99	458	5.86	81.27	11	1.96	98.74	469	5.6	82.44
$12.00 to $12.99	512	6.55	87.82	6	1.08	99.82	518	6.18	88.62
$13.00 to $13.99	241	3.07	90.98	----------	----------	----------	241	2.88	91.5
$14.00 to $14.99	181	2.32	93.21	----------	----------	----------	181	2.16	93.56
$15.00 to $17.99	340	4.36	97.57	1	.18	100	341	4.07	97.73
$18.00 to $20.99	118	1.51	99.08	----------	----------	----------	118	1.41	99.14
$21.00 to $24.99	36	.46	99.54	----------	----------	----------	36	.43	99.57
$25.00 and over	36	.46	100	----------	----------	----------	36	.43	100
Totals	7,817	100	----------	561	100	----------	8,378	100	----------

TABLE VIII. Women's Wages, Mercantile Establishments.
(Including Retail Candy, Millinery, and 5 and 10-Cent Stores.)

Wage rate	San Francisco and the North			Los Angeles and the South			Valley towns			Total		
	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent
Under $4.00	37	.81	.81	58	1.16	1.16	37	1.42	1.42	132	1.09	1.09
$4.00 to $4.99	91	1.99	2.8	200	4.01	5.17	132	5.06	6.48	423	3.48	4.57
$5.00 to $5.99	376	8.21	11.01	241	4.84	10.01	277	10.62	17.10	894	7.35	11.92
$6.00 to $6.99	422	9.21	20.22	328	6.59	16.6	444	17.02	34.12	1,194	9.81	21.73
$7.00 to $7.99	206	4.50	24.72	335	6.73	23.33	176	6.75	40.87	717	5.89	27.62
$8.00 to $8.99	549	11.99	36.71	701	14.1	37.43	332	12.73	53.60	1,582	13	40.62
$9.00 to $9.99	583	12.73	49.44	596	11.96	49.39	267	10.24	63.84	1,446	11.89	52.54
$10.00 to $10.99	430	9.41	58.85	675	13.55	62.94	225	8.63	72.47	1,330	10.93	63.44
$11.00 to $11.99	338	7.38	66.23	193	3.87	66.81	117	4.49	77.06	648	5.32	68.76
$12.00 and over	1,546	33.77	100	1,653	33.19	100	601	23.04	100	3,800	31.24	100
Totals	4,578	100		4,980	100		2,608	100		12,166	100	

TABLE IX. Women's Wages, Laundries.
(Including Dyeing and Cleaning.)

Wage rate	San Francisco and the North			Los Angeles and the South			Valley towns			Total		
	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent
Under $4.00				1	.05	.05				1	.02	02
$4.00 to $4.99				3	.14	.19				3	.07	.09
$5.00 to $5.99	1	.07	.07	94	4.49	4.68				95	2.11	2.20
$6.00 to $6.99	8	.55	.62	256	12.24	16.92	25	2.63	2.63	289	6.43	8.63
$7.00 to $7.99	43	2.97	3.59	571	27.32	44.24	163	17.14	19.77	777	17.3	25.93
$8.00 to $8.99	397	27.38	30.97	300	14.35	58.59	230	24.19	43.96	927	20.64	46.57
$9.00 to $9.99	292	20.14	51.11	315	15.06	73.65	185	19.45	63.41	792	17.63	64.2
$10.00 to $10.99	249	17.17	68.28	143	6.84	80.49	124	13.04	76.45	516	11.49	75.69
$11.00 to $11.99	160	11.03	79.31	65	3.11	83.6	31	3.26	79.71	256	5.7	81.39
$12.00 and over	300	20.69	100	343	16.4	100	193	20.29	100	836	18.61	100
Totals	1,450	100		2,091	100		951	100		4,492	100	

TABLE X. Women's Wages, All Occupations Combined.

Wage rate	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent
Under $4.00	41	.50	.50	61	.73	.73	40	.99	.99	142	.69	.69
$4.00 to $4.99	115	1.39	1.89	215	2.57	3.30	148	3.66	4.65	478	2.31	3.00
$5.00 to $5.99	457	5.52	7.41	399	4.76	8.06	327	8.09	12.74	1,183	5.72	8.72
$6.00 to $6.99	818	9.88	17.29	799	9.54	17.6	556	13.76	26.5	2,173	10.50	19.22
$7.00 to $7.99	565	6.83	24.12	1,125	13.44	31.04	401	9.92	36.42	2,091	10.11	29.33
$8.00 to $8.99	1,173	14.17	38.29	1,171	13.99	45.03	624	15.44	51.86	2,968	14.34	43.67
$9.00 to $9.99	1,198	14.47	52.76	1,064	12.71	57.74	526	13.02	64.88	2,788	13.47	57.14
$10.00 to $10.99	998	12.06	64.82	960	11.47	69.21	386	9.55	74.43	2,344	11.33	68.47
$11.00 to $11.99	638	7.71	72.53	327	3.9	73.11	165	4.08	78.51	1,130	5.46	73.93
$12.00 and over	2,274	27.47	100	2,251	26.89	100	868	21.49	100	5,393	26.07	100
Totals	8,277	100		8,372	100		4,041	100		20,690	100	

TABLE XI. German Hospital Experience for 1913, 1914, 1915.

Exposure (for three years)	3,276
Total hospital days	4,768
Average hospital days per member, 1.46 days.	
Total number of cases	214
Total days	4,768
Average duration of case, 22.28 days.	

TABLE XII. Southern Pacific Hospital Department—Hospital Days.

Year	Cases	Days	Average per case	Members	Days	Average per member
1912–1913	1,242	24,543	19.8	52,782	24,543	.46
1913–1914	1,307	31,456	24.1	52,583	31,456	.60
1914–1915	1,236	25,070	20.3	48,000	25,070	.52
Totals	3,785	81,069	21.4	153,365	81,069	.529

TABLE XIII. Distribution of Southern Pacific Hospital Cases Over Three Weeks Duration.

Number of weeks in hospital	Cases			
	1912-13	1913-14	1914-15	Total
3 to 4 weeks	89	115	99	303
4 to 5 weeks	66	81	59	206
5 to 6 weeks	30	60	55	145
6 to 7 weeks	36	44	23	103
7 to 8 weeks	32	26	25	83
8 to 9 weeks	15	18	17	50
9 to 10 weeks	9	15	14	38
10 to 15 weeks	42	43	21	106
15 to 20 weeks	6	25	12	43
20 to 25 weeks	4	6	2	12
25 to 30 weeks	2	8	4	14
Over 30 weeks	3	7	5	15
Totals	334	448	336	1,118

TABLE XIV. Santa Fe Hospital Association—Hospital Experience.

Year	Number of cases	Hospital days	Average days per case	Number of members	Hospital days	Average days per member
1913	1,260	21,042	16.7	13,527	21,042	1.55
1914	1,077	18,431	17.1	13,527	18,431	1.36
1915	1,167	18,012	15.4	13,527	18,012	1.33
Totals	3,504	57,485	16.4	40,581	57,485	1.42

TABLE XV. Distribution of Hospital Cases of the Santa Fe Fund for Year 1915.

Number of weeks in hospital	Cases	Number of weeks in hospital	Cases
Under 1 week	455	8 to 9 weeks	15
1 to 2 weeks	298	9 to 10 weeks	9
2 to 3 weeks	163	10 to 15 weeks	23
3 to 4 weeks	82	15 to 20 weeks	11
4 to 5 weeks	55	20 to 25 weeks	2
5 to 6 weeks	36	25 to 30 weeks	1
6 to 7 weeks	15		
7 to 8 weeks	21	Total	1,186

TABLE XVI. Records of 1,262 Male Employees in Establishments of the Bay Cities.
Working Days Lost Through Sickness in 1915 in Relation to Wages.

Wage per week	Number in group, total	Cases	Days lost	Average days per case	Number of cases lasting 20 days or over	Out of days lost, number in which sickness lasted 20 days or over
Under $12	78	12	74	6.2		
$12 to $14	186	20	461	23.1	5	358
$14 to $16	347	70	1,209	17.3	18	851
$16 to $18	186	30	534	17.8	6	373
$18 to $20	113	24	627	26.1	5	487
$20 to $24	112	16	220	13.8	3	116
$24 to $28	101	19	195	10.3	1	60
$28 and over	71	9	186	20.7	1	150
Unknown	68	8	102	12.8	1	50
Totals	1,262	208	3,608	17.3	40	2,445

Total number of records	1,262
Average number of days lost per employee	2.9
Percentage of employees losing time	16.5

NOTE.—25 days, 1 month; 6 days, 1 week.

TABLE XVII. Summary of Expenditures of Working Women for Medical Aid and Dentistry, From Schedules Collected by the Industrial Welfare Commission for Their Report of 1914.

Weekly wages	Number of women	Annual expenditure	Annual earning power[1]	Expenditures			Average annual expenditures			Per cent of earning power		
				Medical aid	Dentistry	Total	Medical aid	Dentistry	Total	Medical aid	Dentistry	Total
Under $6.00	24	$8,043 49	$6,436 00	$165 00	$154 50	$319 50	$6 88	$6 44	$13 32	2.6	2.4	5.0
$6.00 to $8.00	108	40,801 75	38,617 36	745 05	539 00	1,284 05	6 90	5 00	11 90	1.9	1.4	3.3
$8.00 to $10.00	184	84,210 29	83,906 20	1,619 40	1,263 00	2,882 40	8 80	6 86	15 66	1.9	1.5	3.4
$10.00 to $12.00	134	68,674 49	72,169 20	2,156 45	1,244 25	3,400 70	16 09	9 29	25 38	3.0	1.7	4.7
$12.00 and over	150	85,578 97	100,970 40	3.164 65	1,653 50	4,818 15	21 10	11 02	32 12	3.1	1.6	4.7
Totals	600	$287,308 99	$302,099 16	$7,850 55	$4,854 25	$12,704 80	$13 08	$8 09	$21 17	2.6	1.6	4.2

[1]This category is not the actual annual income, because no unemployment was taken into account, therefore the per cent of income spent for medical aid and dentistry is somewhat underestimated.

TABLE XVII—Continued.

Expenditures Distributed According to Amounts. Detailed Analysis of Preceding Table.

Weekly wages	No. expenditures	Under $5		$5 to $10		$10 to $25		$25 to $50		$50 to $100		$100 to $200		$200 to $300		$300 and over		Totals	
		No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Medical Aid.																			
Under $6.00	10	4	$7 00	3	$15 00	5	$72 00	2	$71 00									24	$165 00
$6.00 to $8.00	60	19	30 30	10	65 00	12	139 75	4	108 00	2	$102 00					1	$300 00	108	745 05
$8.00 to $10.00	93	30	55 85	26	160 05	21	293 00	9	301 50	1	94 00	3	$365 00			1	350 00	184	1,619 40
$10.00 to $12.00	62	26	48 65	16	97 90	14	203 50	2	65 00	8	501 40	3	430 00	2	$475 00	1	335 00	134	2,156 45
$12.00 and over	76	17	43 65	11	63 50	13	186 60	9	278 50	14	892 50	8	1,151 00	1	250 00	1	300 00	150	3,164 65
Totals	301	96	$185 45	66	$401 45	65	$893 75	26	$624 00	25	$1,589 90	14	$1,946 00	3	$725 00	4	$1,285 00	600	$7,850 55
Dentistry.																			
Under $6.00	14	2	$3 50	2	$16 00	4	$58 00	2	$77 00									24	$154 50
$6.00 to $8.00	79	6	12 50	7	42 00	11	159 50	1	25 00	4	$300 00							108	539 00
$8.00 to $10.00	111	16	39 50	18	114 50	19	263 50	15	455 50	4	290 00	1	$100 00					184	1,263 00
$10.00 to $12.00	59	12	27 75	16	113 50	29	411 00	15	492 00	2	100 00	1	100 00					134	1,244 25
$12.00 and over	74	9	20 50	18	113 50	23	293 50	16	543 00	8	463 00	2	229 00					150	1,653 50
Totals	337	45	$103 75	61	$399 50	86	$1,185 50	49	$1,592 50	18	$1,153 00	4	$429 00					600	$4,854 25
Medical Aid and Dentistry.																			
Under $6.00	7	3	$7 50	3	$19 00	6	$80 00	4	$141 00	1	$72 00							24	$319 50
$6.00 to $8.00	45	18	29 30	10	67 00	24	316 25	4	108 00	5	345 50	1	$100 00			1	$318 00	108	1,284 05
$8.00 to $10.00	62	26	59 35	21	130 00	40	613 05	24	750 50	4	251 50	6	728 00			1	350 00	184	2,882 40
$10.00 to $12.00	30	16	35 10	21	145 95	25	332 20	22	658 05	13	821 90	4	545 50	2	$517 00	1	345 00	134	3,400 00
$12.00 and over	46	16	40 15	15	104 00	17	263 00	24	775 00	17	1,082 50	12	1,668 00	2	580 00	1	305 00	150	4,818 15
Totals	190	79	$171 40	70	$465 95	112	$1,604 50	78	$2,433 05	40	$2,573 40	23	$3,041 50	4	$1,097 00	4	$1,318 00	600	$12,704 80

TABLE XVIII. Expenditures of Organized Laundresses in San Francisco for Medical Aid and Dentistry in 1915.

Weekly wages	Number	Expenditures					Income		Per cent of income				
		Doctor's services	Hospital	Drugs	Dentistry	Totals	Total	Average	Doctor's services	Hospital	Drugs	Dentistry	Total
Miscellaneous[1]	27	$70 00	----------	$60 00	$188 00	$318 00	$9,820 50	$363 72	.7	------	.6	1.9	3.2
$8.00 to $10.00	133	1,085 50	$265 00	487 75	1,208 25	3,041 50	54,201 50	407 53	2.0	.5	.9	2.2	5.6
$10.00 to $12.00	57	788 00	80 00	291 50	476 00	1,635 50	25,509 00	447 53	3.1	.3	1.1	1.9	6.4
$12.00 and over	34	272 00	80 00	115 00	276 00	743 00	22,451 00	660 32	1.2	.4	.5	1.2	3.3
Totals	251	$2,215 50	$425 00	$954 25	$2,143 25	$5,738 00	$111,982 00	$446 14	2.0	.4	.9	1.9	5.1

[1]This class contains those employees who changed their occupation during the year, and whose wages varied.

Actual annual income	Number	Expenditures									
		Doctor's services	Per capita	Hospital	Per capita	Drugs	Per capita	Dentistry	Per capita	All	Per capita
Under $400.00	72	$1,332 00	$18 50	$330 00	$4 58	$410 00	$5 69	$510 00	$7 08	$2,582 00	$35 86
$400.00 to $499.00	124	597 50	4 82	15 00	12	360 25	2 91	1,115 25	8 99	2,088 00	16 84
$500.00 to $599.00	28	170 00	6 07	50 00	1 79	111 50	3 98	262 00	9 36	593 50	21 20
$600.00 to $699.00	12	85 00	7 08	30 00	2 50	36 00	3 00	105 00	8 75	256 00	21 33
$700.00 to $799.00	12	22 00	1 83	----------	--------	30 50	2 54	59 00	4 92	111 50	9 29
$800.00 and over	3	9 00	3 00	----------	--------	6 00	2 00	92 00	30 67	107 00	35 67
Totals	251	$2,215 50	$8 83	$425 00	$1 69	$954 25	$3 80	$2,143 25	$8 54	$5,738 00	$22 86

TABLE XVIII—Continued.

Detailed Data of Amounts Paid by Laundresses for Medical and Dental Services.

Weekly wages	No money spent	Under $5		$5 to $10		$10 to $25		$25 to $50		$50 to $100		$100 to $200		$200 and over		Totals	
		No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Medical Aid.																	
Miscellaneous	19			4	$24 00	2	$21 00	1	$35 00	1	$50 00					27	$130 00
$8.00 to $10.00	69	7	$20 75	19	100 00	23	367 00	8	240 50	5	320 00	1	$139 00	1	$650 00	133	1,837 25
$10.00 to $12.00	27	3	7 50	10	61 50	7	91 00	5	170 00	1	50 00	3	450 00	1	330 00	57	1,160 00
$12.00 and over	13	1	4 50	9	58 00	7	98 00	1	45 00	2	111 00	1	150 00			34	466 50
Totals	128	11	$32 75	42	$243 50	39	$577 00	15	$490 50	9	$531 00	5	$739 00	2	$980 00	251	$3,593 75
Dentistry.																	
Miscellaneous	19			3	$18 00	4	$60 00					1	$110 00			133	$1,203 50
$8.00 to $10.00	88			11	57 25	20	297 00	6	$228 00	6	$371 00	2	250 00			57	476 00
$10.00 to $12.00	38			3	19 00	9	124 00	5	183 00	1	50 00	1	100 00			34	276 00
$12.00 and over	23			1	5 00	5	74 00	4	147 50	1	50 00					27	188 00
Totals	168			18	$99 25	38	$555 00	15	$558 50	8	$471 00	4	$460 00			251	$2,143 50
Medical Aid and Dentistry.																	
Miscellaneous	14			4	$29 00	6	$86 00	1	$35 00	1	$58 00	1	$110 00			27	$318 00
$8.00 to $10.00	48	5	$14 75	13	75 00	38	564 25	13	435 50	12	821 00	3	481 00	1	$650 00	133	3,041 50
$10.00 to $12.00	20	2	4 50	6	38 50	12	174 50	8	289 00	4	229 00	4	550 00	1	350 00	57	1,635 50
$12.00 and over	9	1	4 50	5	30 50	9	121 50	4	148 00	5	288 56	1	150 00			34	743 00
Totals	91	8	$23 75	28	$173 00	65	$946 25	26	$907 50	22	$1,396 50	9	$1,291 00	2	$1,000 00	251	$5,738 00

TABLE XIX. Expenditures of Organized Waitresses in San Francisco for Medical Aid and Dentistry in 1915.

Weekly wages	Number	Expenditures										Income	
		Doctor's services	Per cent of income	Hospital	Per cent of income	Drugs	Per cent of income	Dentistry	Per cent of income	Totals	Per cent of income	Totals	Average
Under $6	4	$20 00	.2			$14 00	.2	$238 00	2.6	$272 00	3.0	$900 00	$225 00
$6 to $8	19	154 00	2.7			78 00	1.4	239 00	4.3	471 00	8.4	5,605 00	295 00
$8 to $10	53	575 00	3.0	$221 60	1.1	110 00	.6	372 50	1.9	1,279 00	6.6	19,448 00	366 94
$10 to $12	134	470 00	.8	10 00	.0	228 00	.4	1,001 00	1.6	1,709 00	2.8	60,854 00	454 13
$12 and over	54	77 00	.2	47 50	.1	110 00	.3	790 00	2.2	1,024 50	2.9	35,286 00	653 44
Totals	264	$1,296 00	1.1	$279 10	.2	$540 00	.4	$2,640 50	2.2	$4,755 60	3.9	$122,098 00	$462 47

Actual annual income	Number	Expenditures									
		Doctor's services	Per capita	Hospital	Per capita	Drugs	Per capita	Dentistry	Per capita	All	Per capita
Under $400	86	$1,246 00	$14 49	$269 10	$3 13	$344 00	$4 00	$1,002 00	$11 65	$2,861 10	$33 27
$400-$499	60	50 00	88	10 00	17	136 00	2 27	474 50	7 91	670 50	11 17
$500-$599	77					40 00	51	601 00	7 81	641 00	8 32
$600-$699	24							279 00	11 63	279 00	11 63
$700-$799	13							195 00	15 00	195 00	15 00
$800 and over	4					20 00	5 00	89 00	22 25	109 00	27 25
Totals	264	$1,296 00	$4 91	$279 00	$1 06	$540 00	$2 05	$2,640 50	$10 00	$4,755 60	$18 01

TABLE XIX—Continued.

Detailed Data of Amounts Paid by Waitresses for Medical and Dental Services.

Weekly wages	No money spent	Under $5		$5 to $10		$10 to $25		$25 to $50		$50 to $100		$100 to $200		$200 to $300		$300 and over		Totals	
		No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Medical aid.																			
Under $6	3							1	$84 00									4	$84 00
$6 to $8	11			4	$23 00			3	109 00			1	$100 00					19	232 00
$8 to $10	44			2	10 00	2	$20 00	2	60 00					2	$496 60	1	$320 00	53	906 60
$10 to $12	112			5	25 00	13	153 00	1	30 00	2	$100 00					1	400 00	134	708 00
$12 and over	46			2	10 00	4	75 00	1	45 00			1	104 50					54	234 50
Totals	216			13	$68 00	19	$248 00	8	$278 00	2	$100 00	2	$204 50	2	$496 60	2	$720 00	264	$2,115 10
Dentistry.																			
Under $6	1			1	$8 00					1	$80 00	1	$150 00					4	$238 00
$6 to $8	12					4	$54 00	1	$25 00	2	160 00							19	239 00
$8 to $10	36			1	5 00	11	175 00	4	117 50	1	75 00							53	372 50
$10 to $12	86			4	29 00	30	397 00	9	252 00	5	323 00							134	1,001 00
$12 and over	32			1	5 00	10	118 00	4	100 00	6	405 00	1	162 00					54	790 00
Totals	167			7	$47 00	55	$744 00	18	$494 50	15	$1,043 00	2	$312 00					264	$2,640 00
Medical aid and dentistry																			
Under $6	1							1	$42 00	1	$80 00	1	$150 00					4	$272 00
$6 to $8	7			3	$18 00	2	$30 00	4	148 00	2	165 00	1	110 00					19	471 00
$8 to $10	30			2	10 00	11	175 00	6	202 50	1	75 00			2	$496 60	1	$320 00	53	1,279 10
$10 to $12	75			6	39 00	34	457 00	11	310 00	7	473 00					1	430 00	134	1,709 00
$12 and over	27			3	15 00	11	149 00	5	134 00	7	460 00			1	266 50			54	1,024 50
Totals	140			14	$82 00	58	$811 00	27	$836 50	18	$1,253 00	2	$260 00	3	$763 10	2	$750 00	264	$4,755 60

TABLE XX.

Laundresses.

Dependency.		No.
Living at home		185
Interdependent	54	
Supporting family	122	
Independent	3	
Helped by family (not contributing)	6	
Not living at home		66
Helping family	14	
Helped by family	--	
Independent	52	
Total		251
Number belonging to lodges		13
Number belonging to hospital associations		5
Number belonging to Metropolitan Laundry Co.'s Association		27
		45

One hundred and ninety-one independent or helping to support family.

Three received hospital service at the City and County Hospital, two at Lane Hospital and two at Mary's Help.

Waitresses.

Dependency.		No.
Living at home		201
Interdependent	128	
Supporting family (partially or totally)	53	
Independent	20	
Not living at home		62
Helping family	8	
Helped by family	5	
Independent	49	
Total		263
One hundred and thirty independent or helping to support family.		
Number getting free hospital treatment (city or county)		8

Amounts of Insured Medical Service.

(All waitresses are entitled to free service of union doctor.)

Number belonging to lodges	4
Number belonging to hospital associations	3

TABLE XXI.

FAMILY INCOME OF PATIENTS.

A. San Francisco Clinics.

Income per week	Males		Females		Children	Total
	Wage earners	Nonwage earners	Wage earners	Nonwage earners	By wage of principal wage earner	
Under $6	46	3	53	30	32	164
$6 to $8	54	4	69	43	33	203
$8 to $10	46	1	55	51	32	185
$10 to $12	80	4	32	84	52	252
$12 to $14	72	1	28	114	79	294
$14 to $16	55	----------	19	90	90	254
$16 to $18	38	2	13	40	52	145
$18 to $20	26	3	13	72	68	182
$20 to $25	60	1	18	87	73	239
$25 to $30	17	1	6	26	21	71
$30 and over	17	3	10	17	23	70
Room and board[1]	46	1	111	12	11	181
Miscellaneous cases	78	17	34	110	65	294
Charity cases	12	5	10	13	13	53
Totals	647	46	471	779	644	2,587

[1]In these cases room and board was included as part of wages, therefore wages could not be classified.

TABLE XXI—Continued.

FAMILY INCOME OF PATIENTS.

B. Los Angeles Clinics.

Income per week	Males		Females		Children	Total
	Wage earners	Nonwage earners	Wage earners	Nonwage earners	By wage of principal wage earner	
Under $6	36	----------	40	12	20	108
$6 to $8	88	2	39	23	47	199
$8 to $10	117	5	33	35	49	239
$10 to $12	85	2	14	35	65	201
$12 to $14	155	4	11	50	98	318
$14 to $16	92	5	5	60	88	250
$16 to $18	22	----------	6	16	19	63
$18 to $20	29	3	1	19	24	76
$20 to $25	32	3	1	11	42	89
$25 to $30	8	----------	1	1	4	14
$30 and over	2	1	1	3	6	13
Room and board[1]	13	----------	11	3	4	31
Miscellaneous cases	166	25	43	69	88	391
Charity cases	91	7	29	9	23	159
Totals	936	57	235	346	577	2,151

[1]In these cases room and board was included as part of wages, therefore wages could not be classified.

TABLE XXII.

WAGE OF PRINCIPAL BREADWINNER IN FAMILIES OF PATIENTS.

A. San Francisco Clinics.

Wage per week	Males		Females		Children	Total
	Wage earners	Nonwage earners	Wage earners	Nonwage earners	By wage of principal wage earner	
Under $6	21	2	73	23	14	133
$6 to $8	23	2	75	27	21	148
$8 to $10	33	1	87	39	33	193
$10 to $12	43	3	38	55	37	176
$12 to $14	84	2	25	129	86	326
$14 to $16	72	1	20	83	87	263
$16 to $18	35	----------	3	52	43	133
$18 to $20	52	1	3	89	79	224
$20 to $25	85	2	4	71	78	240
$25 to $30	24	1	----------	21	22	68
$30 and over	39	2	----------	31	25	97
Room and board[1]	49	2	65	5	5	126
Self employed	38	4	59	66	53	220
Miscellaneous cases	37	18	9	75	48	187
Charity cases	12	5	10	13	13	53
Totals	647	46	471	779	644	2,587

[1]In these cases room and board was included as part of wages, therefore wages could not be classified.

TABLE XXII—Continued.

WAGE OF PRINCIPAL BREADWINNER IN FAMILIES OF PATIENTS.

B. Los Angeles Clinics.

Wage per week	Males		Females		Children	Total
	Wage earners	Nonwage earners	Wage earners	Nonwage earners	By wage of principal wage earner	
Under $6	8	1	21	----------	7	37
$6 to $8	26	1	25	6	18	76
$8 to $10	67	2	33	16	18	136
$10 to $12	51	1	9	20	37	118
$12 to $14	166	4	23	50	90	333
$14 to $16	139	4	8	62	88	301
$16 to $18	29	----------	4	15	16	64
$18 to $20	44	5	1	24	34	108
$20 to $25	89	1	1	27	65	183
$25 to $30	8	1	1	----------	2	12
$30 and over	11	2	1	1	6	21
Room and board[1]	12	----------	9	3	2	26
Self employed	74	4	36	43	60	217
Miscellaneous cases	121	24	34	70	111	360
Charity cases	91	7	29	9	23	159
Totals	936	57	235	346	577	2,151

[1]In these cases room and board was included as part of wages, therefore wages could not be classified.

TABLE XXIII.

CLASSIFICATION OF FAMILIES ACCORDING TO THE NUMBER OF BREADWINNERS AND DEPENDENTS.

A. San Francisco Clinics.

	One breadwinner	Two breadwinners	Three breadwinners	Four breadwinners and over	Total
Families with no dependents	563	59	7		629
Families with 1 dependent	449	61	5		515
Families with 2 dependents	369	42	11	1	423
Families with 3 dependents	319	54	6	3	382
Families with 4 dependents	200	33	4	2	239
Families with 5 dependents	122	12	4	1	139
Families with 6 dependents	56	6	2	1	65
Families with 7 dependents	36	3	4		43
Families with 8 dependents	9	9			18
Families with 9 dependents	4	1	1		6
Families with 10 dependents and over	2	2	1		5
Totals	2,129	1,282	45	8	2,464
Miscellaneous cases					94
Charity cases					29
Grand total					2,587

TABLE XXIII—Continued.

CLASSIFICATION OF FAMILIES ACCORDING TO THE NUMBER OF BREADWINNERS AND DEPENDENTS.

B. Los Angeles Clinics.

	One breadwinner	Two breadwinners	Three breadwinners	Four breadwinners and over	Total
Families with no dependents	465	7	2		474
Families with 1 dependent	329	13	2	1	345
Families with 2 dependents	290	24	7	1	322
Families with 3 dependents	264	11	6	3	284
Families with 4 dependents	191	13	4	1	209
Families with 5 dependents	131	9	5	1	146
Families with 6 dependents	74	7	2	1	84
Families with 7 dependents	39	6	1	2	48
Families with 8 dependents	17			1	18
Families with 9 dependents	8	2			10
Families with 10 dependents and over	4				4
Totals	1,812	92	29	11	1,944
Miscellaneous cases					76
Charity cases					131
Grand total					2,151

TABLE XXIV. Classification According to Occupation of Principal Breadwinner of Families. San Francisco and Los Angeles Clinics.

Occupations	Males		Females		Children	Total
	Wage earners	Non-wage earners	Wage earners	Non-wage earners		
1. Skilled trades, building	129	8	1	105	116	35
2. Skilled trades, mechanical	199	7	15	125	144	49
3. Manufactures, garments	92		99	69	85	34
4. Manufactures, all others	38	4	46	38	47	17
5. Transportation, railroad	22	2		19	38	8
6. Transportation, water	24			28	24	7
7. Transportation, all other	66	3	6	81	62	21
8 Laborers	316	2	15	196	184	71
9. Farmers and agricultural labor	43	3		24	19	8
10. Domestic and personal service	215	16	311	103	145	79
11. Commercial, petty	89	15	4	90	137	33
12. Commercial, salesmen	56	2	33	40	26	15
13. Clerical employees	102	4	110	60	83	35
14. Professional service	37	4	28	21	15	10
15. All other occupations	155	33	38	126	96	44
Totals	1,583	103	706	1,125	1,221	4,73

TABLE XXV. Interplay of Causes for Seeking Charitable Relief. Summary of San Francisco and Los Angeles Charity Cases.

Causes	Total cases	Causes				
		Illness	Other disabilities	Absence of male wage earner	Unemployment and low earning capacity	Miscellaneous reasons
Illness	1,505	1,505				
Illness and other physical and mental disabilities	113	113	113			
Illness and absence of wage earner	366	366		366		
Illness and unemployment	652	652			652	
Illness and miscellaneous reasons	16	16				16
Other physical and mental disabilities	865		865			
Other physical and mental disabilities and absence of wage earner	56		56	56		
Other physical and mental disabilities and unemployment	94		94		94	
Other physical and mental disabilities and miscellaneous reasons	2		2			2
Absence of wage earner	440			440		
Absence of wage earner and unemployment	104			104	104	
Absence of wage earner and miscellaneous reasons	3			3		3
Unemployment	950				950	
Unemployment and miscellaneous reasons	16				16	16
Miscellaneous reasons	114					114
Totals	5,296	2,652	1,130	969	1,816	151

TABLE XXVI. Single Cause Cases. Summary of San Francisco and Los Angeles Charity Cases in Which There Appeared Only One Cause for Seeking Relief.

Causes	No. of cases	Per cent of total cases
Illness	1,505	28.42
Other disability	865	16.33
Absence of male breadwinner	440	8.31
Low earning capacity and unemployment	950	17.94
Miscellaneous	114	2.15
Total cases where there was a single cause for seeking relief	3,874	73.15
Total number of all cases	5,296	100.00

TABLE XXVII. Tuberculosis Cases. Length of Residence in California.

	No. cases	Per cent cases		Cumulative	
				No. cases	Per cent cases
Under 1 year	631	13.49	Under 1 year	631	13.49
1 year to 2 years	318	6.79	Under 2 years	949	20.28
2 years to 3 years	389	8.32	Under 3 years	1,338	28.6
3 years to 4 years	365	7.8	Under 4 years	1,703	36.4
4 years to 5 years	333	7.12	Under 5 years	2,036	43.52
5 years to 6 years	282	6.03	Under 6 years	2,318	49.55
6 years to 10 years	789	16.87	Under 10 years	3,107	66.42
10 years and through 20 years	1,010	21.59	Under 21 years	4,117	88.01
Over 20 years	561	11.99			
Totals	4,678	100.00			

TABLE XXVIII.

Distribution of Families Applying for Charitable Aid, According to Number of Children in Family, San Francisco.

No. of children in family	Families	No. of children 15 and under with				No. of children over 15 with				No. of children ages un known with				Total number of children			
		No parents	1 parent	2 parents	Total	No parents	1 parent	2 parents	Total	No parents	1 parent	2 parents	Total	No parents	1 parent	2 parents	Total
1	586	1	89	372	462	-------	72	36	108	-------	9	7	16	1	170	415	586
2	401	4	40	664	708	6	22	50	78	1	6	9	16	11	68	723	802
3	319	-------	78	802	880	3	16	40	59	-------	9	9	18	3	108	851	957
4	236	-------	120	735	855	-------	25	54	79	-------	1	9	10	-------	146	798	944
5	117	-------	50	476	526	-------	6	45	51	-------	-------	8	8	-------	56	529	585
6	86	-------	46	414	460	-------	9	47	56	-------	-------	-------	-------	-------	55	461	516
7	46	-------	20	272	292	-------	8	23	31	-------	-------	-------	-------	-------	28	295	323
8	12	-------	10	65	75	-------	6	15	21	-------	-------	-------	-------	-------	16	80	96
9	3	-------	15	5	20	-------	3	4	7	-------	-------	-------	-------	-------	18	9	27
10	3	-------	7	18	25	-------	3	2	5	-------	-------	-------	-------	-------	10	20	30
11	5	-------	-------	43	43	-------	-------	12	12	-------	-------	-------	-------	-------	-------	55	55
Totals	1,814	5	475	3,866	4,346	9	170	328	507	1	25	42	68	15	670	4,236	4,921

TABLE XXVIII—Continued.

Distribution of Families Applying for Charitable Aid, According to Number of Children in Family, Los Angeles.

No. of children in family	Families	No. of children 15 and under with				No. of children over 15 with				No. of children ages unknown with				Total number of children			
		No parents	1 parent	2 parents	Total	No parents	1 parent	2 parents	Total	No parents	1 parent	2 parents	Total	No parents	1 parent	2 parents	Total
1	340	-------	42	200	242	-------	47	41	88	1	2	7	10	1	91	248	340
2	327	13	96	446	555	5	27	57	89	-------	1	9	10	18	124	512	654
3	305	6	203	629	838	-------	29	45	74	-------	-------	3	3	6	232	677	915
4	175	-------	145	487	632	-------	26	38	64	-------	-------	4	4	-------	171	529	700
5	117	-------	101	426	527	-------	23	35	58	-------	-------	-------	-------	-------	124	461	585
6	83	-------	66	362	428	-------	17	51	68	-------	-------	2	2	-------	83	415	498
7	33	-------	55	142	197	-------	15	19	34	-------	-------	-------	-------	-------	70	161	231
8	18	-------	8	112	120	-------	-------	24	24	-------	-------	-------	-------	-------	8	136	144
9	8	-------	15	43	58	-------	3	11	14	-------	-------	-------	-------	-------	18	54	72
10	5	-------	-------	43	43	-------	-------	7	7	-------	-------	-------	-------	-------	-------	50	50
Totals	1,413	19	731	2,890	3,640	5	187	328	520	1	3	25	29	25	921	3,243	4,189

TABLE XXVIII—Continued.

Distribution of Children Over Fifteen and Under Fifteen, San Francisco and Los Angeles Charity Cases.

	Percentage of children 15 and under with				Percentage of children over 15 with				Percentage of children ages unknown with				Percentage total children with			
	No parents	1 parent	2 parents	Total	No parents	1 parent	2 parents	Total	No parents	1 parent	2 parents	Total	No parents	1 parent	2 parents	Total
Los Angeles	.45	17.45	68.99	86.89	12	4.46	7.83	12.41	.02	.07	.6	.69	.6	21.98	77.42	100
San Francisco	.1	9.65	78.56	88.31	.18	3.45	6.67	10.3	.02	.51	.85	1.38	.3	13.62	86.08	100

SECTION II.

BURDEN WHICH ILLNESS OF WAGE EARNING FAMILIES PUTS UPON THE PUBLIC.

Having seen what illness is meaning in the families of the individual wage workers, the next question is "What burden is this illness putting upon the public?" The public loss interpreted as the social loss, is absolutely impossible of measurement, for the economic loss to the community resulting from the great number of working days wasted through sickness can merely be guessed at. The financial burden, however, can be estimated in part, and the commission made every effort to get an accurate statement of such public expenditures.

The biggest item in the bill creditable to illness is the cost of maintaining the county (free) hospitals of the state. Since all but three of the county hospitals are in reality a combination of almshouse and hospital it would not be fair to credit all the expense of the institutions to care of the ill. The State Board of Charities and Corrections (the body having official supervision of these hospitals) consider it safe to count one-third of the beds as hospital beds proper and to allocate one-third of the total expense to care of the sick (two-thirds being attributed to support of aged indigents).

The "outdoor relief" or public charity dispensed by the counties to persons made destitute by illness, ranks second. On the basis of its analysis of over 5000 public charity cases (previously discussed in this report) the commission felt it to be quite fair to estimate that in one-half of the outdoor relief cases, illness was a responsible factor of destitution. One-half of the funds spent for outdoor relief was, therefore, charged to illness. Since the Associated Charities of San Francisco does the county relief work for San Francisco County its disbursements were also recorded and one-half allocated to illness.

Medical outrelief or free medical, dental and nursing care furnished by the cities of the state is the third largest item. Communications sent to the largest cities of the state brought direct statements of the municipal expenditures for care of illness.

On the basis of these adjusted statistics the following figures were compiled for the year 1915:

County hospital maintenance	$1,210,176 75
Outdoor relief of counties	680,233 92
Medical outrelief of cities	92,642 68
Associated Charities of San Francisco	83,653 62
	$2,066,706 97

The alarming total of more than $2,000,000 means a direct burden on public funds. It was impossible to secure from the innumerable private charitable organizations, statistics of expenditures for the relief of illness.

The following figures indicate that the expenditures for county outrelief have increased more than 100 per cent in the last four years:

1912–1913	$303,689 28
1913–1914	266,813 78
1914–1915	441,000 00
1915–1916	680,233 92

The cost of supporting county hospitals shows a like marked increase:

1912–1913	$581,315 20
1913–1914	603,095 33
1914–1915	692,100 33
1915–1916	1,210,176 15

In addition to these county and municipal expenditures for the relief of illness, the cost of maintaining the free clinics which dispense medical charity to many wage earners and their dependents, should be considered in recording the financial burden sustained by the public.

The following table shows the items of expense connected with the free clinics. In twelve of these charitable institutions the medical services are unpaid for.*

	Number of clinics	Value of drugs	Cost of nursing	Cost of medical and surgical care	Total
San Francisco and Oakland	11	$25,331 88	$28,758 07	$54,483 46	$108,573 41
Los Angeles	10	6,046 31	17,110 00	11,500 00	34,656 31
Totals	21	$31,378 19	$45,868 07	$65,983 46	$143,229 72

In 5 cases value of drugs not known. In 1 case no drugs were dispensed.
In 2 cases value of nursing not known.
In 6 cases nursing was voluntary.
In 1 case city nurses cared for clinic patients.
In 2 cases cost of medical and surgical care not known.
In 12 cases medical and surgical care were voluntary.

It is evident from these figures that sickness among wage earning families is already putting a tremendous financial burden on public funds. It is equally evident that this burden has been growing steadily larger. For the safety of the public funds, if for no other reason, it would seem imperative that some more fruitful method of dealing with this problem than the present arrangement of inadequate "relief

*For details see Tables XXIX and XXX at end of section.

work'' be devised. An expenditure of a like amount for the pre
tion of destitution would stand out as a splendid investment in con
to this disbursement of over two million dollars a year for me
remedial purposes.

TABLE XXIX. Detailed Information Concerning Free Clinics, San Francisco Oakland.

Clinics	Number of cases	Number of visits	Value of drugs	Cost of nursing	Cost medica surgica
Hospital for Children	337	1,121	$45 85	$720 00	
Cooper's Institute	16,809	89,327	14,490 00	13,140 00	$39,
Hahnemann Hospital	780	4,744	[1]	[2]	1,
Mary's Help Clinic	3,001	8,044	3,200 00	[2]	
Mount Zion Hospital Clinic	22,529	[1]	[1]	[2]	
San Francisco Tuberculosis Clinic	1,212	4,892	434 09	4,098 07	
San Francisco Polyclinic	21,290	[1]	200 00	3,300 00	
Telegraph Hill Clinic	1,500	6,896	743 72	2,040 00	
University of California Clinic	13,646	69,890	3,818 22	4,560 00	[3]13,
Alameda County Society for Prevention of Tuberculosis	731	4,736	900 00	[4]	
Oakland College of Medicine	3,551	15,110	1,500 00	900 00	
Totals	85,386	204,760	$25,331 88	$28,758 07	$54,

[1]No record.
[2]Voluntary.
[3]Both hospital and dispensary (University of California Hospital).
[4]City nurses.

TABLE XXX. Detailed Information Concerning Free Clinics, Los Angele

Clinics	Number of cases	Number of visits	Value of drugs	Cost of nursing	Cost medica surgica
East First Street Dispensary	3,519	13,340	[1]	[1]	
Public School Dispensary	2,718	12,845	$1,151 51	$1,600 00	[2]$6,
Childrens Hospital	538	705	3,509 97	12,000 00	1,
Brownson House	112	1,262	30 91	[2]	
Dental Clinic	5,280	[1]	[4]	[2]	
Ann Street School[6]	688	[1]	44 00	[5]150 00	
Osteopathic Clinic	[1]	[1]	[1]	3,000 00	4,
Pasadena Hospital Clinic[7]	2,729	[1]	109 92	[2]	
Selwyn Emmett Graves	10,169	29,458	[1]	[1]	
East Washington	12,713	[1]	1,200 00	360 00	
Totals	38,466	57,610	$6,046 31	$17,110 00	$11,

[1]Not known.
[2]Voluntary.
[3]Cost of dentists (dental clinic).
[4]None dispensed.
[5]City nurse—cost approximated according to amount of time spent in clinic
[6]Figures given for six months only—approximate figures for one year used in
[7]Figures given for nine months only—approximate figures for one year us
table.

SECTION III.

EFFORTS OF WAGE EARNERS TO PROTECT THEMSELVES.

In view of the hardship that illness brings to the individual wage earner, it was to be expected that there would be attempts at a cooperative shouldering of the burden. A painstaking investigation conducted by the commission disclosed the ways in which wage earners of California have organized to protect themselves against the losses due to illness.

In all instances some form of health insurance was the method of protection employed.

FRATERNAL ORDERS.

By far the greatest number of persons thus protected are members of fraternal orders, whose rules prescribe that a certain cash amount shall be paid for a given number of weeks to members disabled on account of sickness. Some fraternal orders of California do not have this sick benefit feature. Some orders have the ruling that all the branch lodges must make such provision. In others, the giving of such protection is optional with the local lodge, while in still others the carrying of sick benefits is optional within the branch lodge with the individual member.

To secure this data, the commission had to get in first-hand communication with the various local branches of more than twenty orders. Not only is the maintaining of a sick benefit feature optional in some organizations, with the local, but in many orders there is no duty to report this feature to the central office. Thus the grand officers of the organizations were, themselves, unable to state how many of the branch lodges gave sick benefits. The courteous cooperation of these officials, however, enabled the commission to secure directly from the locals a satisfactory statistical record. Complete responses could not be obtained in the case of a few organizations, but the commission is satisfied that it obtained a fairly accurate statement of the case. Data gathered show that almost 300,000 members are listed as entitled to sick benefits in fraternal organizations. This represents 35 per cent of the membership in all the fraternal organizations of the state.* There is of course a considerable amount of duplication in this membership list due to individuals joining several orders. The extent of such "doubling up" was impossible of computation. Officials of the various lodges guess it to be as great as 40 per cent or 50 per cent of the total enrollment. Whatever the duplication, however, the membership is

*See Table XXXI at end of Section III.

substantial and the work of these protective organizations merits description and comment.

The fraternal orders, organized and maintained for both social and protective purposes, are in most respects built along the same lines. They are all mutual benefit societies—democratically managed by their members. Excepting the very old and children, practically all persons in good health are eligible. The dues are about $1 a month, the benefits from $7 to $10 a week for about thirteen weeks (in some few instances twenty-six and fifty-two weeks, and in one, a small benefit, for life). The member is ineligible to benefits until a prescribed time after initiation, as a rule six months.*

A small minority of the lodges give a medical benefit as well as a cash benefit and some few give doctor's services to the immediate family of the members. Major operations are usually excluded from the service guaranteed and only one lodge in the state, a lodge having several thousand members, was found giving hospital treatment. The officials of the various orders stated that the lodges are anxious to give specialist care and hospital treatment and realize the need, but find it financially impossible to do so.

The financial responsibility for such benefits is primarily with the local lodge. Some of the orders, however, safeguard the local societies by providing that the grand lodge shall assume the responsibility in the event of the failure of the local. Some lodges definitely state "that they assume no such responsibility." One lodge having almost 40,000 members protects, through the grand lodge, members of defunct branch lodges only in case they have been members for twenty-five years or more. This order at the same time requires the locals to give such benefits.

The membership rolls of several of the larger orders were examined for the occupations of the members. The great majority proved to be the better paid wage earners. Except in the case of the organizations composed of foreigners of one nationality, few of the lower paid wage groups belong to these protective societies.

Since the local lodge is always the primary and in some cases the final financial unit, the size of the lodge is important. The following

*See Table XXXII.

table compiled from the statistics of ten of the larger orders is illustrative:

Table XXXIII. Summary of Totals.*

Distribution of Membership of Ten of the Larger Fraternal Orders of California.

Average number of members	Number of lodges	Number of members	Per cent		Cumulative		Cumulative per cent	
			Lodges	Members	Number of lodges	Number of members	Lodges	Members
Under 50	327	10,944	25.19	7.07	327	10,944	25.19	7.07
50–99	471	33,456	36.29	21.62	798	44,400	61.48	28.69
100–199	306	42,358	23.58	27.36	1,104	86,758	85.06	56.05
200–299	111	26,808	8.55	17.32	1,215	113,566	93.61	73.37
300–399	46	15,765	3.54	10.18	1,261	129,331	97.15	83.55
400–499	18	7,850	1.39	5.07	1,279	137,181	98.54	88.62
500 and over	19	17,615	1.46	11.38	1,298	154,796	100.00	100.00
Totals	1,298	154,796	100.00	100.00				

Average membership per lodge is 119.

The minimum of membership permitted is so small in most cases as to be of no importance, ten and thirteen being permitted.

The method of decentralization of financial responsibility for sick benefits, unsound from an insurance standpoint, is not unalterable. According to actuarial experts a membership of 250 is the minimum for actual safety and only a small minority of the lodges exceed that limit. That so few of the lodges get into difficulty because of their sick benefit feature, is attributed by experienced fraternal officials to the fact that many of the members never apply for benefits to which they are entitled and to the fact that members through their loyalty to the order, pay assessments when deficiencies arise. Standardization by law of societies giving sick benefits, to the end that financial responsibility should be sufficiently centralized to rest upon groups of a safe size would be an easy process.

Ten orders with a membership in 1915 of over 146,000 had accessible records of their receipts and disbursements which indicated that they spent more than $944,000 in sick benefit and other relief measures.**

These fraternal orders have taught the lesson of health insurance to large groups of wage earners. They practiced it for years before social insurance was heard of in America. The amount of destitution and suffering which they have prevented and alleviated is of real proportions.

Yet from the standpoint of the needs which health insurance should fill, the fraternals find it impossible to meet all demands. Specialist attention, major surgical work, as well as general medical aid and hospital care for the wage earner and his dependents, in addition to a

*Detailed data shown in Table XXXIV. at end of Section III.
**See Table XXXV at end of Section III.

substantial part of wages during disability are essential for full protection. For the money which the fraternals can collect in dues, it is impossible to furnish all these things. The inadequateness of the protection they afford is due, however, not to defects of the fraternal orders, but to the fact that the burden which health insurance should carry and which they are attempting to sustain, is too heavy for the wage earning group alone, even when the insurance method is employed.

TRADE UNIONS.

The next largest medium for protection against the losses of illness, is the labor union. None of the central organizations of labor keep a record of whether or not the various unions have a sick benefit feature and therefore direct communication with all the unions of the state was necessary. Complete records of San Francisco and Los Angeles were secured and about 70 per cent of the unions throughout the state filed statements.

The sick benefit of many unions, though administered by the local, is paid by the international union and there is no financial responsibility on the local organization. In others, the local union adds to the international benefit, and to the extent of the additional sum, has financial responsibility. Few of the unions have made provision for medical service in addition to the cash benefits. Reference to table XXXVI will show the number reporting such service to members. Aside from the unions entitled by law to the Marine Hospital, a negligible number give surgical treatment, and only one union reported hospital service as a benefit. No union reported medical service to the family of the member.

The fact that trade unions, with the many other interests which take their attention, organize and maintain a sick benefit feature, is a real testimonial of the need of health insurance. Forty-one* per cent of the membership of organized labor in California is protected during illness through union action. The protection afforded is less adequate to meet the needs of the situation than in the case of the fraternals. The comment previously made in regard to the protection offered by fraternal orders is equally true of the unions' sick benefit feature. The burden which health insurance should carry is too heavy for the wage earning group alone to sustain.

BENEVOLENT SOCIETIES.

Benevolent societies giving systematic protection of health insurance character are, in point of benefits, of two types. The French and German societies with a membership of 14,646 in the two cities of Los

*See Table XXXVI at end of Section III.

Angeles and San Francisco, own and maintain a hospital and clinic and have a staff of visiting physicians as well. Members pay from $1 to $1.25 dues and they are entitled to medical, surgical and hospital care for as long a period as necessary. Paying patients not members of the societies are admitted to the hospital and the cost of maintaining the hospital is partially met in this way.

The Swiss Benevolent Society, the Ligue of Henry IV and several small societies put the emphasis upon cash benefits rather than medical care. No hospital is maintained by these organizations.

The management of all these societies is in the hands of a board of directors, elected each year by the members themselves. The average duration of the membership of these societies is long and testifies to their usefulness. But from the standpoint of the needs of the wage earner, neither type offers anything like adequate protection.

COMMERCIAL HOSPITAL ASSOCIATIONS.

Similar to the French and German Benevolent Societies in some respects are the commercial hospital associations. These so-called "associations" are a form of insurance organization selling a certain type of health insurance. They are not mutual benefit societies as the name association would suggest, but are business ventures run for the profit of their owners and managed by their owners and not by the members. Most of them are stock corporations.

Eighty of the hospital associations were found and studied. Their rules pertaining to membership and treatment are similar.* Members pay about $1 a month in return for which they are entitled to medical and hospital service in the case of diseases not excluded in the contract. Benefits begin immediately on the payment of dues.

The following quotations from the contract of the North American Hospital Association of San Francisco (one of the more liberal associations) illustrates the things to which the member is *not* entitled:

> "That under this agreement, hospital service will not be provided for more than three months when occasioned by any one illness or accident * * *.
>
> That under this agreement, no medical treatment, surgical operations, hospital service, medicines, surgical dressings or ambulance service will be provided in cases of cancer, locomotor ataxia, tuberculosis, confinement, or attending complications, abortion, miscarriages, or diseases from which the member is suffering at date hereof, or has had previously, and not stated in his written medical examination. Change of life will be treated at offices of our association, and at homes of members. No hospital service will be given

*See Table XXXVII at end of Section III.

for same. Treatment will not be given for venereal diseases during the first thirty days of membership, nor will hospital service be given for any venereal disease. No service will be rendered in any case of syphilis, insanity or attempted suicide.

That under this agreement, this association does not furnish atomizers, syringes, suspensories, elastic stockings, crutches, trusses, eyeglasses or other appliances.

That under this agreement, members will not receive treatment for chronic conditions, relapses, complications or weaknesses arising from sicknesses which occurred previous to membership.

This agreement hereby releases this association from all service for alcoholism and attending complications.

Similar quotations from the contract of the Grace Darling Association (a branch of an association with more than 6,000 members) show even greater limitations:

I understand that the association does not * * * furnish atomizers, syringes, suspensories, trusses, elastic stockings, or other appliances or accessories. * * *

I also agree that my membership in said association shall not be construed to apply to any case of miscarriage, confinement, or the results thereof, chronic female trouble, cancer, change of life, or for insanity, mental disease or epilepsy, or to require the association to furnish any medical or surgical treatment or hospital services at any time made necessary by use of intoxicating liquors or narcotics, nor from any disease or injury or chronic ailment from which I may have been suffering previous to the date thereof. No hospital service, special medicines, serums or Wassermann tests for any venereal or genito-urinary diseases.

Nor will the association treat members or provide hospital service for erysipelas, attempted suicide, scarlet fever, measles, rupture, paralysis, pregnancy, smallpox, tubercular or venereal diseases, bubonic plage, or any other diseases requiring isolation by law. Change of life will be treated at offices of medical staff or at homes of members only. Children 15 years or under receive home and office treatment only.

The California Hospital Association of Sacramento excludes all diseases which might need specialist attention.

Questions as to the members' rights in the field of medical attention are decided always by the company physician. A lawsuit is the member's only alternative to accepting his verdict.

New members are in every case secured by solicitation. The agents, who also do collecting, are paid in some cases, salaries, and in most cases, fees according to the number of risks written. The cost of collection amounts to from 20 to 30 per cent of the gross receipts. Investigations proved that at least 20 per cent goes as profit to the owners. Thus only about $0.50 of every dollar paid by the members goes for the purchase of medical and hospital care.

In no case do the doctors give all of their time to the association. In some instances the association is owned by a physician. In others, regular doctors are paid salaries and emergency doctors are paid fees. The dentists and optometrists give their services for examination free.

The diseases which these associations treat are so limited that the protection which they furnish the member is most inadequate. The short average duration of their membership is evidence of their failure to meet the members needs.

COMMERCIAL INSURANCE COMPANIES.

A few wage earners purchase insurance from private insurance companies. The annual report of the Insurance Commissioner of California does not separate accident and health insurance. It is impossible to make this separation because both accident and health coverage is sold on policies at one rate of premium.

For the three years, 1913, 1914 and 1915, the total volume of business of accident and health insurance in California was as follows:

Years	Premiums received	Losses paid	Loss ratio per cent
1913	$1,967,629 00	$907,397 00	46.1
1914	2,028,851 00	918,443 00	45.2
1915	1,973,000 00	912,888 00	46.2

The volume of business is somewhat modest and it does not show any tendency to increase. The gross cost is more than twice the net benefits.

Since the commission was interested primarily in health insurance an effort was made to ascertain through direct inquiry from all the casualty insurance companies how much of this volume was properly health insurance. Of course, this insurance is not limited to wage-workers. Accident and health insurance are classified as "commercial" and "industrial" insurance. Commercial insurance is written for the most part among persons outside of wage-earning groups at an annual or at least a quarterly premium. Industrial accident and health insurance is written mostly among wage-earning groups, or persons in similar economic conditions, at a monthly premium rate. In addition, there has recently developed a new form, designated as intermediate, with moderate benefits at a quarterly rate of premium.

Various significant conclusions may be derived from data sent in by the insurance companies which covered from 85 to 95 per cent of the total volume of health insurance written in California. While the loss ratio fluctuates between 44.5 per cent and 47 per cent for the entire volume of business, it is substantially higher for accident than for health insurance, being approximately one-half for accident and less

than 40 per cent for health. So far as the volume of business is concerned, a little more than $300,000, or 20 per cent, can be claimed for health insurance. Even if we credit the health insurance business with 20 per cent of that part of the business which is not separated into accident and health, the total amount will still not exceed $375,000. Since the minimum annual premium is about $12, and it rises from that to possibly $35, it is evident that commercial health insurance business throughout the state does not cover more than about 20,000 people, very few of whom are wageworkers, or, in other words, it is of very little significance so far as the problem of sickness is concerned.

Table XXXVIII at end of section 3 is illustrative of these facts.

SUMMARY.

It is then apparent that many of the wage earners of California have made efforts to protect themselves against the financial losses of illness. They are providing certain types of health insurance for themselves in mutual benefit organizations such as the fraternals, unions and benevolent societies. They are purchasing certain types of health insurance from casualty companies and commercial hospital associations.

Even assuming that there be no duplication among members of these mutual benefit societies and policyholders of the commercial companies, statistics show that little more than one-third of the wage earners of the state are protected through their voluntary efforts. The great majority of this one-third are the better paid wageworkers and not those of smallest earning capacity, who are even more in need of protection.

The protection secured in these various ways, while preferable to no protection at all is, from the standpoint of the wage earners' needs, inadequate. A guarantee of medical care (including specialist attention, hospital accommodation) for the wage earner and his dependent family, as well as a substantial cash benefit for the wage earner during disability, is the need which health insurance should fill. No such complete protection is afforded through existing insurance facilities for wage earners nor could it be for the price which the wage earners can and do pay for health insurance. The most extensive benefits are furnished by some of the fraternal orders and the most limited by the commercial hospital associations. The burden of illness, too heavy for the individual wage earner, is also too great for the wage earning group, even when the insurance method is employed.

Contribution from other economic groups, responsible in part for the illness of wage earning families, toward the health insurance of the wage earners, would permit wage earners to secure really adequate protection without a burdensome tax on their earnings.

Table XXXI. Fraternal Orders in California.

Class	Number orders	Per cent	Total membership	Per cent	Membership in sick benefit department
Orders in which all lodges maintain sick benefit features	21	35.59	[1]223,175	35.40	223,175
Orders in which sick benefit is optional with lodge. (Accurate data)	6	10.17	60,445	9.58	46,653
Orders in which sick benefit is optional with lodge. (Approximate data)	10	16.95	[2]95,719	15.18	[3]14,548
Orders in which sick benefit is optional with members	8	13.56	103,756	16.46	[3]6,844
Totals	45	76.27	483,095	76.62	291,220
Orders which do not maintain sick benefit	14	23.73	147,372	23.38	----------
Totals	59	100	630,467	100	291,220

[1]Membership of two not known.
[2]Membership of one not known.
[3]Impossible to determine membership of five orders.

TABLE XXXII.

Study of the Constitutions of Ten Representative Fraternal Orders Which Maintain a Sick Benefit Feature.

Qualifications for admission	1	2	3	4	5
Age	21 to 50 years	21 to 50 years	21 to 50 years	18 years and over	18 to 45 years
Health condition	[1]	Medical exam.	Medical exam.	Medical exam.	Medical exam.
Minimum and maximum initiation fee	$10.00[2]	$10.00[2]	$5.00 to $50.00	$5.00[2]	$5.00 to $10.00
Minimum amount of dues	$0.12½ per week	$9.00 per year	$0.75 per month	[2]	$1.10 per month
Minimum and maximum weekly cash benefits[3]	$4.00[3] [4]	$5.00 to $10.00	$0.25 per day[2]	[2]	$7.50
Duration of cash benefit in weeks	[3]	13	12	[3]	13
Waiting period after initiation before member is eligible to cash benefits	6 months	6 months	6 months	6 months	6 months
Medical benefit—					
Doctor		*	*		*
Medicine		*	*		*
Waiting period after initiation before member is eligible to medical benefits		6 months	6 months		No waiting period
Treatment for families[5]		*	*		* [6]

[1]Medical examination not required.
[2]Left to discretion of each lodge.
[3]Not stated.
[4]By-laws may provide that a member having received $500, as sick benefit, may thereafter receive $2.00 per week sick benefit.
[5]There is a waiting period of three months.
[6]In two orders, saloonkeepers, bartenders and professional gamblers are barred.
[7]One of the orders does not state diseases which are exempt from benefit; nine of the orders exempt any disease brought on by intemperance, illegal or immoral conduct; six orders exempt any disease which the member may have had previous to joining. The same exemptions are made in cases where medical benefit is given.
[8]In no case is confinement treated.
*Affirmative answer.

TABLE XXXII—Continued.

Study of the Constitutions of Ten Representative Fraternal Orders Which Maintain a Sick Benefit Feature—Continued.

Qualifications for admission	6	7	8	9	10
Age	18 to 50 years	16 to 45 years	18 to 50 years	21 to 50 years	18 to 50 years
Health condition	Medical exam.	[1]	[1]	[2]	Medical exam.
Minimum and maximum initiation fee	$5.00 to $10.00	$1.00[3]	$3.00[3]	$4.00[3]	$5.00 to $15.00
Minimum amount of dues	$12.00 per year	[2]	$1.50 per quarter	$4.00 per year	[2]
Minimum and maximum weekly cash benefits[8]	$1.00 to $7.50[5]	$5.00[3]	$1.00[3]	[2]	[2]
Duration of cash benefit in weeks	[2]	13	[2]	[2]	[2]
Waiting period after initiation before member is eligible to cash benefits	[2]	6 months	6 months	[2]	[2]
Medical benefit—					
Doctor	[2]				*
Medicine	[2]				[2]
Waiting period after initiation before member is eligible to medical benefits	[2]				[2]
Treatment for families[9]					[2]

[1]Medical examination not required.
[2]Left to discretion of each lodge.
[3]Not stated.
[4]By-laws may provide that a member having received $500, as sick benefit, may thereafter receive $2.00 per week sick benefit.
[5]If medical benefit is not furnished, the maxmum cash benefit may be $10.00.
[6]There is a waiting period of three months.
[7]In two orders, saloonkeepers, bartenders and professional gamblers are barred.
[8]One of the orders does not state diseases which are exempt from benefit; nine of the orders exempt any disease brought on by intemperance, illegal or immoral conduct; six orders exempt any disease which the member may have had previous to joining. The same exemptions are made in cases where medical benefit is given.
[9]In no case is confinement treated.
*Affirmative answer.

TABLE XXXIV. Fraternal Orders

	Ind. Order of Odd Fellows, June 30, 1915	Ancient Order Foresters, 1915	Knights of Pythias, 1914	United Ancient Order of Druids, 1916	Native Sons of the Golden West, Jan. 1, 1916
Total membership	45,592	6,704	23,612	13,586	20,448
Number of lodges	403	92	[1]222	130	[2]171
Average number of members	113.13	72.87	106.36	104.51	119.58

Lodges According

Classification	Lodge	Members	Lodge	Members	Lodge	Members	Lodge	Members	Lodge	Members
Under 50	96	3,505	45	1,423	45	1,600	40	1,227	46	1,387
50-99	144	10,086	27	1,853	101	7,309	46	3,429	59	4,213
100-199	100	13,632	14	1,968	53	7,224	28	3,714	38	5,417
200-299	44	10,596	6	1,450	14	3,385	8	1,890	13	3,136
300-399	12	4,045	-------	-------	6	1,974	5	1,707	4	1,348
400-499	4	1,784	-------	-------	1	419	2	907	8	3,367
500 and over	3	1,944	-------	-------	2	1,701	1	712	3	1,580
Total	403	45,592	92	6,704	222	23,612	130	13,586	171	20,448

Cumu

Under 50	96	3,505	45	1,423	45	1,600	40	1,227	46	1,387
Under 100	240	13,591	72	3,286	146	8,909	86	4,656	105	5,600
Under 200	340	27,223	86	5,254	199	16,133	114	8,370	143	11,017
Under 300	384	37,819	92	6,704	213	19,518	122	10,260	156	14,153
Under 400	393	41,864	92	6,704	219	21,492	127	11,967	160	15,501
Under 500	400	43,678	92	6,704	220	21,911	129	12,874	168	18,868

Cumulative—

Under 50	23.82	7.69	48.91	21.23	20.27	6.78	30.77	9.03	26.9	6.78
Under 100	59.55	29.81	78.26	49.02	65.76	37.74	66.15	34.27	61.4	27.38
Under 200	84.36	59.71	93.48	78.37	89.63	68.33	87.69	61.61	83.63	53.87
Under 300	95.28	82.95	100.00	100.00	95.94	82.67	93.85	75.52	91.23	69.22
Under 400	98.26	91.82	100.00	100.00	98.65	91.03	97.70	88.08	93.57	75.81
Under 500	99.25	95.73	100.00	100.00	99.10	92.80	99.24	94.76	98.25	92.27

[1]Total number of lodges 229, 7 did not report on membership.
[2]Total number of lodges 172, 1 did not report on membership.
[3]Total number of lodges 124, 3 did not report on membership.
[4]Total number of lodges 46, 1 did not report on membership.
[5]Total number of lodges 65, 3 did not report.
[6]Total membership 3,353, 1 member of Grand Lodge.
[7]Total membership 1,838, 2 members at large.

—Distribution of Membership.

Order der Hermann Sohne, 1915	Improved Order Red Men, Aug. 1915	Young Men's Institute, 1915	Loyal Order Moose	Independent Order B'nai B'rith, Dec. 31, 1914	Total
[6]3,352	14,164	4,922	20,100	2,316	154,796
31	[3]121	[4]45	[5]62	21	1,298
168.13	117.06	109.38	---------- ----------	110.29	119.26

to Membership.

Lodge	Members	Lodge	Members	Lodge	Members	Lodge	Members	Lodge	Members	Lodge	Members
8	284	22	756	15	457	4	139	6	166	327	10,944
11	801	51	3,537	15	978	12	916	5	324	471	33,456
9	1,285	30	4,085	9	1,368	17	2,532	8	1,133	306	42,358
1	291	10	2,324	3	645	11	2,878	1	213	111	26,808
2	691	5	1,728	2	737	10	3,535	-------	-------	46	15,765
-------	-------	1	485	-------	-------	1	408	1	480	18	7,850
-------	-------	2	1,249	1	737	7	9,692	-------	-------	19	17,615
31	3,352	121	14,164	45	4,922	62	20,100	21	2,316	1,298	154,796

lative.

8	284	22	756	15	457	4	139	6	166	327	10,944
19	1,085	73	4,293	30	1,435	16	1,055	11	490	798	44,400
28	2,370	103	8,378	39	2,803	33	3,587	19	1,623	1,104	86,758
29	2,661	113	10,702	42	3,448	44	6,465	20	1,836	1,215	113,566
31	3,352	118	12,480	44	4,185	54	10,000	20	1,836	1,261	129,331
31	3,352	119	12,915	44	4,185	55	10,408	21	2,316	1,279	137,181

Per Cent.

25.81	8.47	18.18	5.35	33.33	9.29	6.46	.69	28.57	7.17	25.19	7.07
61.29	32.37	60.33	30.31	66.66	29.16	25.81	5.25	52.38	21.16	61.48	28.69
90.32	70.70	85.12	59.15	86.66	56.95	53.23	17.85	90.48	70.08	85.06	56.05
93.55	79.38	93.38	75.56	93.33	70.06	70.97	32.17	95.24	79.28	93.61	73.37
100.00	100.00	97.42	87.75	97.78	85.03	87.10	49.75	95.24	79.28	97.15	83.55
100.00	100.00	98.35	91.18	97.78	85.03	88.71	51.78	100.00	100.00	98.54	88.62

TABLE XXXV. Chart Showing Receipts and Expenditures—Fraternal Orders.

	Number lodges	Membership	Dues	Initiation fee	Other payments	All other receipts	Total receipts	Sick benefit	Funeral benefit	General relief	Total relief	Total all other expenditures	Total expenditures
Foresters of America—													
1913	160	19,478	$207,496	$15,260	----------	$52,760	$275,516	[5]$129,839	$14,752	$5,944	$150,535	$112,481	$263,016
1914	162	18,161	198,762	6,745	----------	50,286	255,793	124,228	16,019	5,465	145,712	108,670	254,382
1915	156	17,185	190,895	9,416	----------	53,807	254,118	122,079	15,192	4,309	141,580	115,023	256,603
Independent Order of Odd Fellows—													
1913	410	46,099	528,486	63,170	----------	200,123	791,779	[4]250,888	50,609	73,689	375,186	357,221	732,407
1914	409	45,925	514,499	54,821	----------	210,405	779,725	243,584	48,499	72,713	364,796	339,871	704,667
1915	408	44,831	511,882	44,591	----------	212,319	768,792	234,607	48,890	74,812	358,309	335,927	694,236
Orden der Hermanns Sohne—													
1913	43	4,314	53,115	2,428	----------	10,974	66,517	[4]24,007	9,114	----------	33,121	[5]24,275	57,396
1914	43	4,356	53,622	2,198	----------	9,619	65,439	25,243	8,233	----------	33,476	24,386	57,862
1915	44	4,321	54,244	2,024	----------	10,550	66,818	25,858	13,166	----------	39,024	26,910	65,934
Knights of Pythias—													
1913	220	21,929	215,661	29,081	$2,655	77,919	325,346	[4]62,545	16,277	12,044	90,866	201,324	292,190
1914	226	22,908	220,632	31,692	2,908	62,785	318,102	68,843	14,651	13,727	97,221	199,715	296,936
1915	229	23,612	222,085	29,632	2,505	65,584	319,806	67,012	17,534	14,982	99,528	212,016	311,544
Sons of St. George—													
1913	15	1,716	16,755	1,787	842	3,644	23,028	[5]5,045	1,309	359	6,713	9,599	16,312
1914	15	1,830	17,897	1,651	517	7,424	27,489	7,898	1,255	514	9,667	12,503	22,170
1915	16	1,838	17,080	1,616	922	4,666	24,284	8,004	2,000	1,165	11,169	12,839	24,008
Improved Order of Red Men—													
1913	137	14,792	173,008	22,360	1,761	30,836	227,965	[3]73,896	[3]14,603	[3]4,435	[3]92,934	121,676	214,610
1914	135	14,982	[1 2]	[1 2]	[1 2]	[1 2]	227,965	75,497	12,221	[1 2]	92,153	121,676	213,829
1915	129	14,164	159,251	14,766	850	32,131	206,998	72,086	11,121	6,515	89,672	123,443	213,115
Totals (6 orders)—1913	965	108,265	$1,194,521	$134,086	$5,258	$376,286	$1,710,151	$546,220	$106,664	$96,471	$749,355	$826,576	$1,575,931
1914	990	108,112	1,178,420	119,467	5,271	371,355	1,674,573	515,298	100,878	96,854	743,025	806,821	1,549,846
1915	976	105,951	1,155,437	102,045	4,277	379,057	1,640,816	529,596	107,903	101,788	739,282	826,158	1,565,440
Young Men's Institute—													
1913	39	4,495	[1]	[1]	[1]	[1]	$55,664	[1]	[1]	[1]	$14,616	$34,844	$49,460
1914	39	4,536	[1]	[1]	[1]	[1]	53,792	[1]	[1]	[1]	15,550	38,367	53,917
1915	46	4,531	[1]	[1]	[1]	[1]	65,098	[1]	[1]	[1]	15,546	36,536	52,082
United Ancient Order of Druids—													
1913	133	12,600	[1]	[1]	[1]	[1]	189,944	[4]$71,539	$8,323	$2,674	82,536	60,499	143,035
1914	132	13,027	[1]	[1]	[1]	[1]	190,683	70,777	8,589	3,673	88,039	78,968	162,007
1915	128	13,103	[1]	[1]	[1]	[1]	202,133	77,137	9,675	5,127	91,939	62,906	154,845

Independent Order of B'Nai B'Rith—													
1913	19	2,347	[1]	[1]	[1]	[1]	36,260	[4]7,809	2,846	1,704	11,253	14,398	25,651
1914	20	2,325	[1]	[1]	[1]	[1]	32,023	6,824	2,259	2,489	11,572	23,908	35,480
1915	21	2,275	[1]	[1]	[1]	[1]	41,748	6,207	2,535	665	11,009	20,381	31,390
Native Sons of the Golden West—													
1913	182	20,748	[1]	[1]	[1]	[1]	306,315	[1]	[1]	[1]	72,369	240,294	312,663
1914	174	20,541	[1]	[1]	[1]	[1]	296,381	[1]	[1]	[1]	86,114	170,085	256,199
1915	172	20,448	[1]	[1]	[1]	[1]	303,066	[1]	[1]	[1]	86,802	200,396	287,198
Totals (4 orders)—1913	373	40,190	[1]	[1]	[1]	[1]	$588,183	[1]	[1]	[1]	$180,774	$350,035	$530,809
1914	365	40,429	[1]	[1]	[1]	[1]	581,879	[1]	[1]	[1]	196,275	311,328	507,603
1915	367	40,357	[1]	[1]	[1]	[1]	612,045	[1]	[1]	[1]	205,296	320,219	525,515
Grand totals—1913	1,358	148,455	[1]	[1]	[1]	[1]	$2,298,334	[1]	[1]	[1]	$930,129	$1,176,611	$2,106,740
1914	1,355	148,541	[1]	[1]	[1]	[1]	2,256,392	[1]	[1]	[1]	939,300	1,118,149	2,057,449
1915	1,343	146,308	[1]	[1]	[1]	[1]	2,252,861	[1]	[1]	[1]	944,578	1,146,377	2,090,955

[1]No data available.
[2]Data for six months only—doubled to give annual amounts.
[3]Figures for 1913 used to obtain total.
[4]Does not include cost of medical benefit.
[5]Medical benefit included.
[6]Information incomplete and data kept out of totals for this reason.

TABLE XXXVI. Unions Giving Sick Benefits.

Trade	Membership	Monthly dues	Weekly benefits	Duration
San Francisco—				
Amalgamated Carpenters, Nos. 2554, 2555, 2558	427	35c wk.	Members under 3 yrs.: $3.15 first 15 wks. $2.10 second 15 wks. Members over 3 yrs.: $4.20 first 15 wks. $2.10 second 15 wks. $1.75 wk. until well	
Bakers No. 24	800	$2 00	$7 00	16 weeks.
Bakery Salesmen No. 106[5]	100	1 50	7 00	[14]
Barbers No. 148	775	1 25	10 00	16 weeks.
Bartenders No. 41[5]	1,300	[4]14 00	$1.00 first week. 7 00	16 weeks.
Bay and River Steamboatmen[10]	500	1 00	1 00	[14]
Boilermakers No. 6	414	1 75	$1.00 first week $7.00 10 weeks $5.00 10 weeks $3.00 10 weeks	31 weeks.
Boot and Shoe Workers No. 216	102	[3]30	[12]5 00	13 weeks.
Brass and Chandelier Workers No. 158	60	1 25	[12]5 00	13 weeks.
Cigarmakers No. 228	310	[3]30	[12]5 00	13 weeks.
Cloth Cap Makers No. 9	40	[3]25	5 00	13 weeks.
Cook's Helpers No. 110	768	1 00	2 00	4 wks. at a time 8 wks. in 1 year.
Drug Clerks Association	1,545	1 00	7 50	10 weeks.
Electrical Workers No. 151	490	2 00	7 00	10 weeks.
Electrical Workers No. 537	60	1 50	7 00	16 weeks.
Elevator Constructors No. 8	135	1 25	$5.00 first week $10.00 seven weeks $5.00 five weeks	13 weeks.
Garment Cutters	46	1 10	5 00	8 weeks.
Garment Workers No. 131	500	55	5 00	8 weeks.
Grocery Clerks No. 648	275	1 25	10 00	12 weeks.
Ice Wagon Drivers No. 519	116	1 25	[12]5 00	20 weeks.
Leather Workers on Horse Goods	33	[3]30	5 00	10 weeks.
Machinists No. 68	1,400	1 00	5 00	12 weeks.
Marine Firemen[10]	400	75	1 00	[14]
Marine Gasoline Engineers No. 471	229	1 00	[1]	[1]
Moving Picture Operators[8]	86	1 50	10 00	10 weeks.
Metal Polishers	50	1 50	5 00	[1]
Milkers No. 8861	[1]	1 50	$10.00 ten weeks $5.00 ten weeks	20 weeks.
Milk Wagon Drivers No. 226	420	[4]14 00	7 00	12 weeks.
Millmen No. 42	295	1 00	6 00	10 weeks.
Molders No. 164	1,000	[3]40	[12]5 40	13 weeks.
Painters No. 19[5]	854	[*]1 00	5 00	6 weeks.[9]
Patternmakers	185	[3]65	8 00	13 weeks.
Plasterers No. 66	619	1 50	[3]	
Plumbers No. 442	400	1 30	5 00	13 weeks.
Post Office Clerks No. 2	340	1 00	$10.00 thirteen weeks $5.00 thirteen weeks $1.00 until well	
Retail Clerks No. 432	107	1 00	10 00	12 weeks.
Retail Shoe Clerks No. 410	180	1 00	10 00	12 weeks.
Sailors Union of the Pacific[10]	4,000	75	[3]30	[14]
Sprinkler Fitters No. 663	22	1 30	[12]5 00	13 weeks.

[*]Fifty cents a quarter for sick fund.
[1]Not stated.
[2]Dues per day.
[3]Dues per week.
[4]Dues per year.
[5]Give medical benefit.
[8]Benefits for accidents.
[9]For six weeks in every six months.
[10]United States Marine Hospital Service.
[12]After first week.
[14]No limit.

TABLE XXXVI. Unions Giving Sick Benefits—Continued.

Trade	Membership	Monthly dues	Weekly benefits	Duration
Steamfitters No. 509	80	$1 30	$5 00	13 weeks.
Steamfitters Helpers No. 441	20	1 30	5 00	13 weeks.
Steamfitters No. 590	101	1 30	5 00	13 weeks.
Tailors No. 80	430	1 00	8 00	10 weeks.
Tailors No. 2	365	95	5 00	10 weeks.
Teamsters No. 85	2,000	1 00	[12]7 00	13 weeks.
Tobacco Workers No. 72	9	[3]10	3 50	[11]
Typographical No. 21	970	1 00	$10.00 fifty-two wks. $5.00 until well	
United Glass Workers No. 696	220	1 50	5 00	10 weeks.
Wood, Wire and Metal Lathers No. 65	158	1 75	5 00	14 weeks.
Total number of unions, 49; total membership, 23,736.				
Los Angeles—				
Bakers No. 37	290	$0 95	$7 00	16 weeks.
Barbers No. 295	300	1 25	8 00	16 weeks.
Bartenders No. 284	566		$1.00 first week $7.00 ten weeks	11 weeks.
Beer Drivers No. 6	81	50	5 00	12 weeks.
Carpenters No. 158	650	1 00	4 00	5 wks. in any 3 mos.
Carpenters No. 426	135	1 00	5 00	11 weeks.
Carpenters No. 2516	25	1 00	4 00	5 wks. in any 3 mos.
Cigarmakers No. 225	335	20c-30c	5 00	13 weeks.
Electrical Workers No. 61	280	1 50	7 00	12 weeks.
Elevator Constructors No. 18	50	1 00 1 50	[16]	
Garment Workers No. 125	522	[15]15	3 00	8 weeks.
Lithographers No. 22	39	1 50	5 00 10 00	[14]
Millmen No. 884	150	1 00	5 00	6 weeks.
Moving Picture Operators No. 150	80	1 50	5 00	12 weeks.
Plumbers No. 78	125	[1]	5 00	13 weeks.
Pressmen No. 78	70	1 50	$1.00 first week. 7 00	[1]
Press Feeders No. 37	70	1 75	$1.00 first week. $7.00 seven weeks	8 weeks.
Post Office Clerks No. 64	250	35	10 00	13 weeks.
Retail Clerks No. 83	25	1 00	5 00	12 weeks.
Tailors No. 81	360	65	5 00	10 weeks.
Waiters No. 17	250	1 00	7 00	8 weeks.
Total number of unions, 21; total membership, 4,653.				
Bakersfield—				
Bakers No. 146	10	$1 35 1 50	$7 00	16 weeks.
Barbers No. 317	45	1 25	5 00	16 weeks.
Bartenders No. 378[5] [6]	135	[4]15 00	7 00	10 weeks.
Carpenters No. 743	80	1 25	5 00	10 weeks.
Cigarmakers No. 469	28	[3]30	5 00	13 weeks.
Retail Clerks No. 1217	40	*1 00 †75	[17]5 00	12 weeks.

*Males; †females.
[1]Not stated.
[3]Dues per week.
[4]Dues per year.
[5]Give medical benefit.
[6]Minor surgical treatment.
[11]Set aside $1 from dues to give members as needed.
[12]After first week.
[14]No limit.
[15]For the sick fund.
[16]Optional with sick committee.
[17]After first year's membership.

TABLE XXXVI. Unions Giving Sick Benefits—Continued.

Trade	Membership	Monthly dues	Weekly benefits	Duration
Berkeley—				
Post Office Clerks No. 47	25	$0 50	$5.00 first week $7.00 twelve weeks	13 weeks.
Bodie—				
Miners No. 61	20	$1 00	$10 00	10 weeks.
Eureka—				
Bartenders No. 406	60	$1 00	$5 00	8 weeks.
Cigarmakers	21	[3]30	5 00	13 weeks.
Fresno—				
Bakers No. 43	50	$1 50	$7 00	52 weeks.
Bartenders No. 566[5] [6]	80	1 50	$1.00 first week $7.00 seven weeks	8 weeks.
Painters No. 294	109	1 25	$1.00 first week $5.00 three weeks $4.00 fifth week	5 weeks.
Plumbers No. 246	44	1 30	5 00	13 weeks.
Retail Clerks No. 170[7]	40	1 00	5 00	10 weeks.
Jackson—				
Miners No. 135	700	[4]$15 00	$7 00	12 weeks.
Long Beach—				
Plumbers No. 494	12	$1 75	$5 00	13 weeks.
Merced—				
Carpenters No. 1702	28	$1 00	$2 50	10 weeks.
Modesto—				
Barbers No. 24	18	$1 00	$5 00	16 weeks.
Painters No. 317	7	1 00	5 00	[14]
Napa—				
Garment Workers No. 137	104	$0 55	$3 00	8 weeks.
Oakland—				
Bakers No. 119	177	$2 00 1 50	$7 00	16 weeks.
Barbers No. 134	400	1 25	10 00	16 weeks.
Boot and Shoe Workers No. 446	38	[3]25 [4]13 00	5 00	13 weeks.
Cigarmakers No. 253	80	[3]20 30	5 00	13 weeks.
Electrical Workers No. 283	400	1 25	7 00	10 weeks.
Leather Workers No. 172	11	[3]30	5 00	10 weeks.
Machinists No. 284	1,000	1 25	5 00	10 weeks.
Retail Clerks No. 47	112	1 25	5 00	12 weeks.
Steamfitters No. 342	38	1 30	5 00	13 weeks.
Pacific Grove—				
Plumbers No. 62	7	$1 30	$5 00	13 weeks.
Pasadena—				
Bakers No. 25	40	$1 50	$7 00	13 weeks.
Electrical Workers No. 418	63	1 50 1 00	10 00 7 00	13 weeks.
Plumbers No. 280	36	[2]10	5 00	13 weeks.
Petaluma—				
Barbers No. 419	20	$1 25	$10 00	13 weeks.
Boot and Shoe Workers No. 335	36	[3]25	5 00	13 weeks.
Machinists No. 575	20	1 25	5 00	26 weeks.

[2]Dues per day.
[3]Dues per week.
[4]Dues per year.
[5]Give medical benefit.
[6]Minor surgical treatment.
[7]Medical, surgical and hospital treatment.
[14]No limit.

TABLE XXXVI. Unions Giving Sick Benefits—Continued.

Trade	Membership	Monthly dues	Weekly benefits	Duration
Randsburg—				
Miners No. 44	55	$1 00	$7 00	10 weeks.
Richmond—				
Retail Clerks No. 1179	50	$1 00	$5 00	12 weeks.
Steamfitters No. 436	85	1 30	5 00	13 weeks.
Riverside—				
Electrical Workers No. 440	35	$1 25	$7 00	8 weeks.
Sacramento—				
Bakers No. 85	100	$1 00		
		1 50		
		2 00	$7 00	16 weeks.
Barbers No. 112	120	1 00	5 00	8 weeks.
Bartenders No. 603	100	1 25	5 00	8 weeks.
Cigarmakers No. 238	100	[3]30	5 00	13 weeks.
Electrical Workers No. 36	100	1 50	[12]8 00	16 weeks.
Machinists No. 33	180	1 25	5 00	12 weeks.
Plumbers No. 447	50	1 35	5 00	13 weeks.
Tailors No. 107	60	1 00	5 00	10 weeks.
San Bernardino—				
Barbers No. 253	62	$1 00	$3 00	10 weeks.
Bartenders No. 558	57	1 00	5 00	13 weeks.
Plumbers No. 364	18	1 30	5 00	13 weeks.
San Bruno—				
Carpenters No. 848	18	$1 25	$7 50	13 weeks.
San Diego—				
Bakers No. 90	68	$1 50	$7 00	16 weeks.
Bartenders No. 768	150	1 00	[1]6 00	10 weeks.
Cigarmakers No. 332	76	[3]30	5 00	13 weeks.
Painters No. 333	73	1 50	7 00	8 weeks.
Retail Clerks No. 769	13	85	8 00	12 weeks.
San Jose—				
Barbers No. 252	75	$1 00	$3 00	10 weeks.
Carmen No. 265	132	1 25	5 00	7 weeks.
Cigarmakers No. 291	65	[3]30	5 00	13 weeks.
Electrical Workers No. 332	85	1 25	5 00	10 weeks.
Plumbers No. 393	44	1 50	5 00	13 weeks.
Tailors No. 108	22	1 00	5 00	10 weeks.
San Pedro—				
Bartenders No. 591	40	$1 00	$7 00	10 weeks.
Marine Firemen and Oilers[10]	2,500	75	1 00	Until well.
Retail Clerks No. 905	25	1 00	5 00	10 weeks.
Santa Barbara—				
Barbers No. 560	21	$0 75	$5 00	16 weeks per year.
Carpenters No. 1062	95	1 00	5 00	7 weeks.
Plumbers No. 114	33	1 30	5 00	13 weeks per year.
South San Francisco—				
Iron, Steel and Tin Workers No. [5]	200	$1 00		
		1 25	$5 00	13 weeks.
Stockton—				
Barbers No. 312	115	$1 00	$10 00	26 weeks.
Bartenders	176	1 25	7 00	10 weeks.
Electrical Workers No. 207	55	1 25	5 00	10 weeks.
Hod Carriers No. 73	30	75	5 00	13 weeks.
Plumbers No. 492	20	1 30	5 00	13 weeks.
Teamsters No. 22	100	1 00	5 00	10 weeks.

[1]Not stated.
[3]Dues per week.
[5]Give medical benefit.
[10]United States Marine Hospital Service.

TABLE XXXVI. Unions Giving Sick Benefits—Continued.

Trade	Membership	Monthly dues	Weekly benefits	Duration
Vallejo—				
Barbers No. 335	45	$1 00	$3 00 5 00	16 weeks.
Electrical Workers No. 180	100	1 25	7 00	6 weeks.
Plumbers No. 343	36	1 30	5 00	12 weeks.

Total unions (outside San Francisco and Los Angeles)	80
Total membership outside San Francisco and Los Angeles	9,718
Grand totals of unions giving sick benefits—	
Number of unions	150
Membership	38,107
Grand total of unions not giving sick benefits—	
Number of unions	351
Membership	55,519

TABLE XXXVII. Analysis of Eight Commercial Hospital Associations.

	1	2	3	4	5	6	7	8
Number of members	6,000	1,200	[1]2,600	2,000	3,000	2,000	3,800	1,062
Entrance fee	-------	$2 00	-------	$2 00	$2 00	$2 00	-------	-------
Regular monthly dues for adults	$1 00	$1 00	$1 00	$1 00	$1 00	$1 00	$1 00	$1 00
Number of physicians and surgeons employed	4	7	3	3	4	[2]	4	1
How paid—Salary	4	2	-------	3	4	[2]	[2]	[2]
Fee	-------	5	3	-------	-------	[2]	[2]	[2]
Specialists affiliated with association	7	2	2	2	1	[2]	[2]	[2]
How paid—Salary	7	-------	-------	[2]	1	[2]	[2]	[2]
Fee	-------	2	2	[2]	-------	[2]	[2]	[2]
Pharmacy owned by association	-------	-------	[2]	*	*	[2]	[2]	[2]
Pharmacy, rates	*	*	[2]	-------	-------	[2]	[2]	[2]
Association receives from hospital—								
Rates	-------	*	-------	*	*	[2]	[2]	[2]
No rates	*	-------	*	-------	-------	[2]	[2]	[2]

NOTE.—Approximate total number of members, 21,662. All doctors and specialists give part time only.

*Affirmative answer.

[1]Mechanics are excluded from membership.

[2]No data.

[3]Services given to association.

[4]Legal advice is also given.

TABLE XXXVIII. Accident and Health Business of Casualty Companies.

Class of business	Premiums 1915	Losses 1915	Loss ratio per cent 1915
Commercial—			
Accident	$1,041,356 00	$527,717 00	50.7
Health	222,938 00	86,039 00	38.6
Accident and health (not separated)	40,630 00	20,943 00	51.5
Totals	$1,304,924 00	$634,699 00	48.6
Industrial—			
Accident	$176,594 00	$63,897 00	36.2
Health	103,035 00	37,206 00	36.1
Accident and health (not separated)	107,679 00	34,345 00	31.9
Totals	$387,308 00	$135,448 00	35.0
Intermediate—			
Accident	$18,158 00	$3,001 00	16.5
Health	7,665 00	731 00	9.5
Accident and health (not separated)	52,059 00	12,206 00	23.4
Totals	$77,882 00	$15,938 00	20.5
All lines—			
Accident	$1,236,108 00	$594,615 00	48.1
Health	333,638 00	123,976 00	37.1
Accident and health (not separated)	200,368 00	67,494 00	33.7
Totals	$1,770,114 00	$786,085 00	44 4

SECTION IV.

EFFORTS OF EMPLOYERS TO PROTECT EMPLOYEES.

Needs of the wage earners are sooner or later a matter of concern to industry. The growing need of California wage earners for protection against the results of illness inevitably attracted the attention of some employers. Investigations made by the commission give a fair picture of what the employers are doing to provide for their employees during illness.

MANUFACTURING ESTABLISHMENTS.[1]

Among the manufacturing establishments of the state, there is little systematic provision of this nature. Of 602 firms responding, only 26 with 23,681 men replied that they had any regular protective system, while 576 with 69,592 employees reported that they made no provision. This latter number is understated as 39 firms neglected to give the number of persons in their employ. The provision made is, as a rule, either a guarantee of medical, surgical and hospital care or else a cash benefit during disability.[2]

It should be stated in addition that many of the firms replied that, though they had no regular sick benefit, they customarily continued the wages of their office employees during illness. Quite a number also wrote special letters expressing their interest in health insurance, and stating that they felt that employers would gladly contribute to such a protective system for their employees.

OIL COMPANIES.

Six of the oil companies of the state returned statements indicating that three have no form of sickness provision for their employees, while three provide medical and surgical (hospital) treatment for which the employees are required to pay $1 a month. Treatment for the families is not included. The number of employees in the three companies giving medical benefit to their men totals 3,546.

LUMBER COMPANIES.

Forty-one (of the 53) lumber companies of the state employing 25 men or more responded to the commission's inquiries. Seventeen of these companies make no provision for sickness of their men, while twenty-four do.[3]

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[1]The manufacturing concerns questioned were those listed with the Bureau of Labor Statistics of the state that had more than twenty-five employees. The Bureau of Labor construes the term "manufacturing" very broadly and includes all establishments carrying on manufacturing even as a most minor activity.

[2]Table XXXIX at the end of Section IV.

[3]Table XL at end of Section IV.

The Scotia Hospital Association of the Pacific Lumber Company is a very interesting organization since it is a hospital association that, in addition to giving medical, surgical and hospital service, provides a cash benefit as well. This association is a corporation owned and operated by the employees of the company. A sick employee who is in the hospital more than five days is paid $1 per day up to 75 days of disability.

DEPARTMENT STORES.

The department stores of Sacramento, Stockton, San Diego, San Jose and Fresno were questioned but only three were found maintaining a sick benefit feature for their employees. Six stores in San Francisco, five in Los Angeles and three in Oakland, all having sick benefit funds, were investigated and the funds were studied. The principal features of the funds were put into tabulated form.[4]

This table indicates that the cash benefit is the ordinary benefit in most of the funds, while in all but one establishment, the employees' dues practically support the fund. Welfare workers in the establishments stated that the cash benefit, while a great help, was not sufficient protection against serious illness, as medical and hospital bills in serious illness could not be met by the employees, and the firm as a matter of charitable assistance was often called upon to help out.

It should be noted that in the majority of cases, membership in the fund is compulsory. In some cases, insurance was voluntary at the time the fund was started, the employees later voting to make it compulsory.

PUBLIC UTILITIES.

According to the last report filed with the Railroad Commission, twenty-six of the public utilities of the state provide for their employees during sickness to the extent of furnishing medical aid. In no case are cash benefits provided. The extent of medical care (that is, whether or not it includes operations and hospital treatment) was not stated in most cases, so no accurate record of these points is available. In all instances, the cost of this medical treatment is mainly met by contributions from the employees. The amount paid by the men in the twenty-six companies is as follows:

In 15 companies men pay 50 cents per month.
In 6 companies men pay $1 per month.
In 2 companies men pay from 50 cents to $1 per month.
In 1 company men pay 65 cents per month.
In 2 companies no information on this point.

In addition to the medical departments of the twenty-six companies which filed statements with the Railroad Commission, there is a "hospital department" maintained by The Atchison, Topeka and Santa Fe

[4]Table VLI at end of Section IV.

railroad employees. This "hospital association" is a corporation owned and managed by the employees of the company. Fifty cents a month is paid by men earning less than $100 and $1.00 by those earning more than $100. The money is collected by the company as in the case of the medical departments maintained by the companies.

The Southern Pacific Company and the Santa Fe Hospital Association own well equipped hospitals which are devoted to the care of sick and injured employees.

The number of men protected through the medical departments of the public utilities totals, according to these reports, 79,941.

MINES.

Of the 64 mines filing records, 30 had arranged that hospital and medical service should be provided for their men, while 34 had made no provision whatever. In no case were cash benefits arranged for.

It should be noted also that in eight cases there is no charge to the men benefited for this medical service and that in several cases some provision is made for the families of the employees. Of the 34 mines reporting no provision, four neglected to state the number of men employed, but the remaining 30 totaled 1,618 men.

Thus in the mining industry, although only one-half of the individual mines have taken steps to protect their men during illness, fully three-fourths of the men in the industry are assured of medical care.

SUMMARY.

The need of the wage earner for protection against the financial loss of illness is already attracting the attention of California employers. Many firms in an unsystematic way continue wages of office employees, but no firms make it a practice of continuing wages of wage earners. Some establishments are systematically providing a type of health insurance for their employees for which the employees in most cases are required to pay. A comparatively small percentage of the wage earners of the state are employed by firms which make regular provision for sickness periods of their employees. No establishment is maintaining of its own initiative a system giving complete protection, though several approach such a system. The larger concerns with the greatest number of employees, as is usual with all protective work, have in general the most adequate protective systems.

A desire to contribute toward a protective scheme has been shown by many employers who feel that they can not as individual units sustain the entire burden of caring for the illness of their men, and yet recognize a partial responsibility.

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[a]Table XLII at end of Section IV.

TABLE XXXIX. Provisions for Benefits in Manufacturing Concerns.

I. *Hospital Association Type.*

	Employees	Number of doctors employed	Monthly association fee	Treatment of families
1	400	3	$1 00	
2	225	1	1 00	[1]
3	250	1	45	
4	125–400	1	50	*
5	345	2	50	
6	500–600	1	1 00	*
7	1,000–1,200	1	50	
8	100	4	[2]	[3]
9	1,000	2	50	
10	140	[4]	1 00	
11	2,371	[4]	1 00	[4]
12	38	[5]	1 00	
13	60	[5]	65	
14	224	[5]	[6]	
15	6,000–7,000	5	[7]15	
16	178	[8]		
17	200–300	[8]		
18	400	[8]		
19	191	[9]		

NOTE.—Approximate total number of employees, 14,584.
*Affirmative answer.
[1]Family given rates.
[2]The fee varies.
[3]Advice and examinations free.
[4]Not stated.
[5]Employees all belong to commercial hospital association.
[6]Rate is 60 cents per man every three weeks.
[7]Employee pays 40 cents, employer 20 cents.
[8]Weekly payment.
[9]Company makes provision for emergency in sickness.
[10]Each employee is entitled to 28 days in year with pay for sickness.

II. *Cash Benefit Type.*

	Number employees	Association fee	Amount and duration of benefit[2]
1	6,000	[1]	Full pay for 4 to 13 weeks, and additional half-pay for 9 weeks to 39 weeks.
2	1,932	[1]	
3	[4]	[1]	
4	140	50¢	$10.00 for 8 weeks.
5	450	25¢–50¢	$5.00 for 10 weeks.[3] $10.00 for 10 weeks.
6	200	25¢–50¢	[4]
7	375	50¢	$7.50. [5]

NOTE.—Approximate total number employees, 9,097.
[1]Paid by company.
[2]Benefits are received in proportion to length of employment. Employees are eligible to first benefits after two years of service.
[3]Benefits received in proportion to dues paid.
[4]Not stated.
[5]Duration not stated.

TABLE XL. Lumber Companies.

	Number employees	Number of doctors employed	Association fee	Treatment of families
1	500	1	$1 00	1*
2	200	1	1 00	*
3	180-219	1	1 00	*
4	400	3	1 00	
5	1,000	8	1 00	
6	75	1	1 00	
7	600	1	75¢-1 00	
8	50	1	1 00	
9	185	1	1 00	
10	2,000	2	1 00	
11	500-700	1	75	
12	800	2	1 00	
13	70	1	1 00	
14	200	1	1 00	1*
15	400	3	1 00	
16	1,398	2	1 00	1*
17	200	1	1 00	1*
18	200	2	1 00	
19	450-500	2	1 00	
20	1,000	2	1 00	1*

NOTE.—10,552 approximate total employees.
*Affirmative answer.
[1]Family receives rates.

TABLE XLI. Department Stores.

Firms	Number of employees	Where association is compulsory	Minimum and maximum monthly dues	Minimum and maximum weekly benefits	Duration of benefits	Period of employment before employees are eligible to belong
1	200- 270		$0 20-$0 50	$3 00-$7 50	6 weeks	7 days
2	450	*	10- 75	†7 50	8 weeks	30 days
3	800- 900		25	5 00	10 weeks	30 days
4	650	*	15- 60	3 00- 8 00	8 weeks	[1]
5	1,100-1,500	*	20- 50	†7 50	8 weeks	30 days
6	421	*	25- 50	5 00-10 00	10 weeks	14 days
7	150	*	25- 75	[2]	[1]	[3]
8	500- 600	*	10- 50	2 00-10 00	12 weeks	90 days
9	1,400	*	[4]	5 00-10 00	11 weeks	[1]
10	155- 165	*	10- 75	3 00-12 00	10 weeks	30 days
11	400	[1]	25- 50	5 00-10 00	10 weeks	[1]
12	360	*	25- 50	5 00-10 00	12 weeks	[1]
13	350		25- 50	3 50- 7 00	[5]14 weeks	[1]
14	600		25- 1 00	5 00-10 00	10 weeks	90 days
15	109	[1]	25- 50	5 00-10 00	8 weeks	7 days
16	110- 140	[1]	10- 50	5 00	8 weeks	[3]
17	85	[1]	10- 50	2 00-10 00	10 weeks	[1]

NOTE.—Approximate total number employees, 8,195.
†Half salary.
*Affirmative answer.
[1]Not stated.
[2]No cash benefit given. Doctor, medicine and room and board rate in hospital furnished.
[3]No waiting period.
[4]Employer pays fee.
[5]Reduced benefits are paid for eight weeks longer.

TABLE XLII. Mines.

Number of mines having some provision for sickness of employees	Total number of employees	Number of doctors employed by each firm	Cost to employees
5	162	1	Free
1	858	3	$0 80
1	231	3	1 00
4	590	1	1 00
1	200	3	$1 00-1 50
2	330	[1]1	1 00
3	225	[2]	Free
1	175	[1 2]	$0 50
1	100	2	75
1	100	[2]	1 00
1	494	2	1 00
8	416	[2]	1 00
1	200	[2]	$1 00-1 50
30	4,081		

[1]Rates given to families.
[2]Not stated.

SECTION V.

FIELD SURVEY.

The town of South San Francisco, located in San Mateo County on the border of San Francisco Bay, is to a great extent an industrial real estate development. It was planned originally to make the town the meat packing center of the state, but this scheme fell through and a variety of industries are now represented.

The town proper of South San Francisco is located on the southern slope of San Bruno Mountain. The water supply is adequate and free from contamination. There is a modern service system and the general sanitation is fairly good, the streets being well paved and most of the houses being provided with sanitary plumbing. There are at least ten lodging houses with a capacity of fifteen or over, and about three hundred men live in these lodging houses. It is difficult to get any accurate figures on the population of the town, but it is probable that there are not over three thousand residents.

A house to house investigation of the residence district in which the industrial population is located was made. Most of the wage earners are Irish-American and southern European with a small scattering of other nationalities.

There are at present three physicians and one dentist practicing in South San Francisco. One physician does all the industrial accident insurance work, except that of the Pacific Coast Steel Company, which is performed by a second physician, and the third physician does only private and lodge practice.

There is a well equipped hospital of twenty beds arranged in three wards of five and six beds and three private rooms. It is owned and maintained by one of the physicians and used by the other two for their patients. There is a staff of three nurses. The ward rate for private persons is $15 per week and the insurance companies are charged $12.50.

Medical attention, where not provided for under one of the contract arrangements by which the bulk of the medical work for the industry population is performed, is furnished at $2 per home visit and $1 for office calls.

In maternity cases the charge for a normal obstretical treatment at home is $25 and $35 for an instrument case. The charge at the hospital is the same, plus $20 a week for hospital accommodation. There are numerous midwives in town whose usual charge for services, including nursing, is $30. There is also a great deal of unlicensed

midwifery done on the mutual plan by neighbors with generally good results.

The city has installed a dental chair in the grammar school and the dentist gives three hours a week without charge for a school children's clinic. Supplies are furnished by the city to the amount of about $6 per month.

Contracts for medical service are found in two main forms, as factory contracts and lodge contracts. The details of these contracts are as follows:

1. Factory contracts.

The employees of the Pacific Coast Steel Company have a contract with a physician under the terms of which $1 per month is deducted from the wages of each employee, who, in case of sickness, receives therefore, without further charge, medical treatment and supplies, hospital treatment up to eight months, all operations and also genito-urinary work. The family of the employee also receives free medical attention at the office and all necessary medicines; there is a charge of one dollar made per visit and deliveries are made for ten dollars. Members of the family also go to the hospital for $12.50 per week.

The Western Meat Company and the Schaw-Batcher Pipe Works have similar contracts with a physician by which fifty cents per month is deducted from the pay of each employee who receives medical treatment, hospital care and supplies, excluding genito-urinary work and major operations; there is no definite arrangement in regard to the family of the employee.

2. Lodge contracts.

Three of the lodges operating in the town have medical attention contracts, the Eagles, the Moose and the Italian Lodge S. O. M. S. These contracts are all the same and call for medical attention only at house or office for the member and all dependents. No treatment is given for genito-urinary, or alcoholism cases, major operations nor maternity cases. There is no provision for hospital treatment or supplies. The physician for one lodge is paid annually by the lodge $3.50 per member, while in the other lodges, where the member is entitled to select his own physician in advance, the practice is for the lodge to pay the doctor twenty-five cents per month per member.

Employment, except for common laborers, is fairly steady. The average wage for skilled laborers is high, the common laborer's wage is about $2.25.

In addition to the South San Francisco survey, a house to house investigation was made of a district of San Francisco, the majority of whose inhabitants were mostly Russian wage earners (some Irish and

American). Since the town of South San Francisco was one of unusual industrial prosperity with high wage standards, the San Francisco district was deliberately selected because it represented one of the poorer districts of the city. Blanks similar to those used in South San Francisco were filled out for each of the families. Many of the wage earners were employed at the Union Iron Works of San Francisco. The Union Iron Works has a compulsory medical feature for its employees. A well equipped hospital is maintained. The employees are charged 15 cents a week and for this are entitled to medical and hospital care. Operations are not guaranteed unless the employee has been in the service of the company for five years.

In comparing the statistics of the two communities, the first noticeable feature is the difference in wage levels. The majority of the wage earners in South San Francisco are receiving from $20 to $30 a week and over, while the majority in the San Francisco district earn less than $16 a week.[7]

The tables indicating the number of persons carrying some sort of health insurance show a striking contrast between the two communities.[8] The insurance for cash benefits is secured by the wage earners through their own efforts only, while insurance for medical benefits in many cases is required by the establishments at which the wage earners work. Therefore, a comparison of the two communities on the score of protection through insurance for cash benefits, is of more significance. Forty-one per cent of the South San Francisco wage earners have thus protected themselves while only four men less than 2 per cent in the San Francisco district investigated have made such provision. Only one of these four men earned less than $16 per week, though the majority of the wage earners of the district earn less than that amount.

It is interesting to note the number of persons who are doubly and even trebly insured for cash benefits in South San Francisco.* In some cases the benefits totaled a larger sum than the earnings of the insured person. This would not seem to be a healthy condition as a tendency to take "sick time" unnecessarily might be expected. Investigation showed, however, only one instance among the doubly and trebly insured persons of the receipt of sick benefits during the preceding year. The "mutual benefit" nature of the societies undoubtedly tends to counteract the tendency to malinger. Persons who might be unscrupulous in dealing with a commercial company are apt to be more careful when dealing with an organization whose financial condition is a matter of direct concern to themselves.

[7] See Table XLIII at end of Section V.
[8] See Table XLIV at end of Section V.
* See Table XLV at end of Section V.

The difference in the rate of sickness of the two communities is also noticeable. Climatic conditions in the two districts are practically identical, sanitary conditions are also the same, so the difference in sickness rate can not be ascribed to such causes. Assuming that there should be a housing standard of one room for each individual* in the family, 55 per cent of the families in the San Francisco district are below the standard in contrast to 33 per cent in South San Francisco.[9]

Ninety-five per cent of the men in South San Francisco are reported in good health, whereas only 81 per cent of the men in the San Francisco district investigated are so reported. Again, 91 per cent of the women in South San Francisco are in good health, in contrast to 76 per cent of the women in the San Francisco community. It is significant that a high rate of illness and low percentage of voluntary health insurance are both found in the low wage level community.[10]

Thus among the wageworkers whose earnings are lowest and who can least afford the financial losses of illness, the sickness rate is found to be unusually high, while, at the same time, the percentage of persons who have of their own initiative sought protection through insurance is negligible.

SUMMARY.

Summing up, the cross-sections of these two industrial communities having similar climatic conditions and sanitary conditions show that the sickness rate in the low wage level community is very high (only 81 per cent of the men and 76 per cent of the women being in good health at the time of investigation) and that a negligible percentage of the population has sought protection through voluntary insurance against sickness losses.

This but bears out European experience where in the countries having voluntary subsidized health insurance the better paid wage earners protected themselves while the poorer paid workers, whose sickness hazard was higher and who could least afford the expense of illness, neglected to do so. It but bears out the explanation given by the women wage earners (whose experience was previously discussed in Section I) of the fact that so few of them were members of protective societies. As they said, "If you insure perhaps you won't get sick, and when every nickel counts, you'd rather take a chance than spend the money for something you may not need."

Natural as this situation is, however, the social danger embodied in the fact that large group of persons of small earning capacity are unprotected against the hazards of sickness, is obvious. And even

[9] See Table XLV at end of Section V.
[10] See Table XLVI at end of Section V.
* See Table XLV at end of Section V.

though a large percentage of persons in the prosperous community of South San Francisco have of their own initiative sought protection against the results of illness, the fact that a substantial percentage of these better paid workers have not taken this precaution, emphasizes the limitations of the *laissez faire* system even among persons whose "every nickel" is not so all important.

8—27699

TABLE XLIII. Number in Family in Relation to Income of Family Head.

Weekly wage	South San Francisco. Number in family							San Francisco district. Number in family						
	2	3	4	5	6	7 and over	Total	2	3	4	5	6	7 and over	Total
Under $12	3	-------	1	1	1	-------	6	3	8	4	3	-------	2	20
$12 to $14	6	7	9	7	5	2	36	4	11	14	13	9	16	67
$14 to $16	9	8	8	12	3	1	41	5	2	10	7	5	7	36
$16 to $18	2	5	3	2	3	-------	15	1	-------	-------	3	1	-------	5
$18 to $20	3	14	6	5	4	1	33	2	2	15	3	3	4	29
$20 to $25	7	16	18	10	7	4	62	3	1	3	2	2	4	15
$25 to $30	9	10	9	7	3	5	43	2	1	2	-------	-------	1	6
$30 and over	11	15	9	4	7	11	57	-------	-------	2	-------	1	1	4
Totals	50	75	63	48	33	24	293	20	25	50	31	21	35	182
Head of family not wage earner or unemployed	6	4	3	2	1	1	17	4	7	3	6	1	6	27
Grand totals	56	79	66	50	34	25	[2]310	24	32	53	37	22	41	[1]209

[1]Wages not stated in 14 cases.
[2]Wages not stated in 9 cases.

TABLE XLIV. Number of Persons Insured in Relation to Wages of Head of Family.

South San Francisco District.

Wages of family head	Medical benefits					Cash benefits			
	Males	Females	Children	Number with no benefits	Total	Males	Females	Number with no benefits	Total
Under $12	7	4	3	32	46	8	2	36	46
$12 to $14	41	8	18	112	179	28	3	148	179
$14 to $16	48	15	28	97	188	39	3	146	188
$16 to $18	22	6	8	28	64	14		50	64
$18 to $20	30	7	16	82	135	26	2	107	135
$20 to $25	71	15	25	109	220	57	4	219	220
$25 to $30	48	11	25	124	208	36		172	208
$30 and over	97	22	31	150	300	68	4	228	300
Totals	364	88	154	794	1,400	276	18	1,106	1,400

San Francisco District.

Wages of family head	Medical benefits					Cash benefits			
	Males	Females	Children	Number with no medical benefit	Total	Males	Females	Number with no benefits	Total
Under $12	4			85	89			89	89
$12 to $14	42			220	262	1		261	262
$14 to $16	25			124	149			149	149
$16 to $18	1			10	11	1		10	11
$18 to $20	11			125	136			136	136
$20 to $25	15			120	135	1		134	135
$25 to $30	15		1	101	117			117	117
$30 and over	24		1	118	143	1		142	143
Totals	137		2	903	1,042	4		1,038	1,042

TABLE XLIV.—Continued.

Number of Family Heads Insured.

	San Francisco			South San Francisco		
	Family heads insured	Family heads not insured	Totals	Family heads insured	Family heads not insured	Totals
Medical benefits	88	130	218	247	77	324
Cash benefits	4	214	218	212	112	324

TABLE XLV. Amount of Duplication of Insurance for Cash and Medical Benefits in Relation to Wages of Head of Family in South San Francisco.

	Income of family head								
	Under $12	$12 to $14	$14 to $16	$16 to $18	$18 to $20	$20 to $25	$25 to $30	$30 and over	Total
Persons insured for cash benefits—									
Singly	10	28	34	7	21	45	25	51	221
Doubly		3	6	6	5	14	8	19	61
Trebly			2	1	2	2	3	2	12
Totals	10	31	42	14	28	61	36	72	294
Persons insured for medical benefits—									
Singly	14	58	77	33	45	107	78	134	546
Doubly		9	14	3	8	4	6	15	59
Trebly								1	1
Totals	14	67	91	36	53	111	84	150	606

NOTE.—In the San Francisco District there were no persons insured in more than one fund or lodge.

TABLE XLVI. Number in Family in Relation to Number of Rooms.

	San Francisco district		South San Francisco	
	Number	Per cent	Number	Per cent
Number of families having less than one room per person	126	54.8	109	32.8
Number of families having one room per person	46	20.0	68	20.5
Number of families having more than one room per person	58	25.2	155	46.7
Totals	230	100.0	332	100.0

TABLE XLVII. Number of Women Working in Relation to Wages of Head of Family.

Wages	South San Francisco	San Francisco district
Under $12	2	3
$12 to $14	1	14
$14 to $16	1	5
$16 to $18	3	2
$18 to $20	4	4
$20 to $25	11	2
$25 to $30	7	
$30 and over	17	1
Totals	46	31
Head of family not wage earner or unemployed	6	9
Grand totals	52	40

SECTION VI.

HOSPITAL SPACE AVAILABLE IN THE STATE.

Since the cost of hospital care at the commercial rates in California puts private hospital service beyond the reach of many wage earners, it is important to know what free hospital facilities are available. With the exception of a very few endowed institutions that maintain free wards and wards at reduced rates for needy patients, all the free hospital beds are found in the county (free) hospitals of the state.

As previously stated,* only three counties of the state have institutions that are strictly hospitals, Los Angeles, San Francisco and Santa Clara. In the remaining counties the "hospital" is a combination of hospital proper and almshouse. In many of these institutions, equipment and general housing conditions are so deficient as to make the hospitals, in the estimation of the State Board of Charities and Corrections, absolutely unfit for the care of the sick.

In the map I constructed to show the number of free hospital beds per thousand of population in the different parts of the state, the number per thousand of population of free hospital beds, irrespective of their fitness, is indicated by the letter (a), and the number per thousand of population of beds rated as "satisfactory" is indicated by the letter (b).

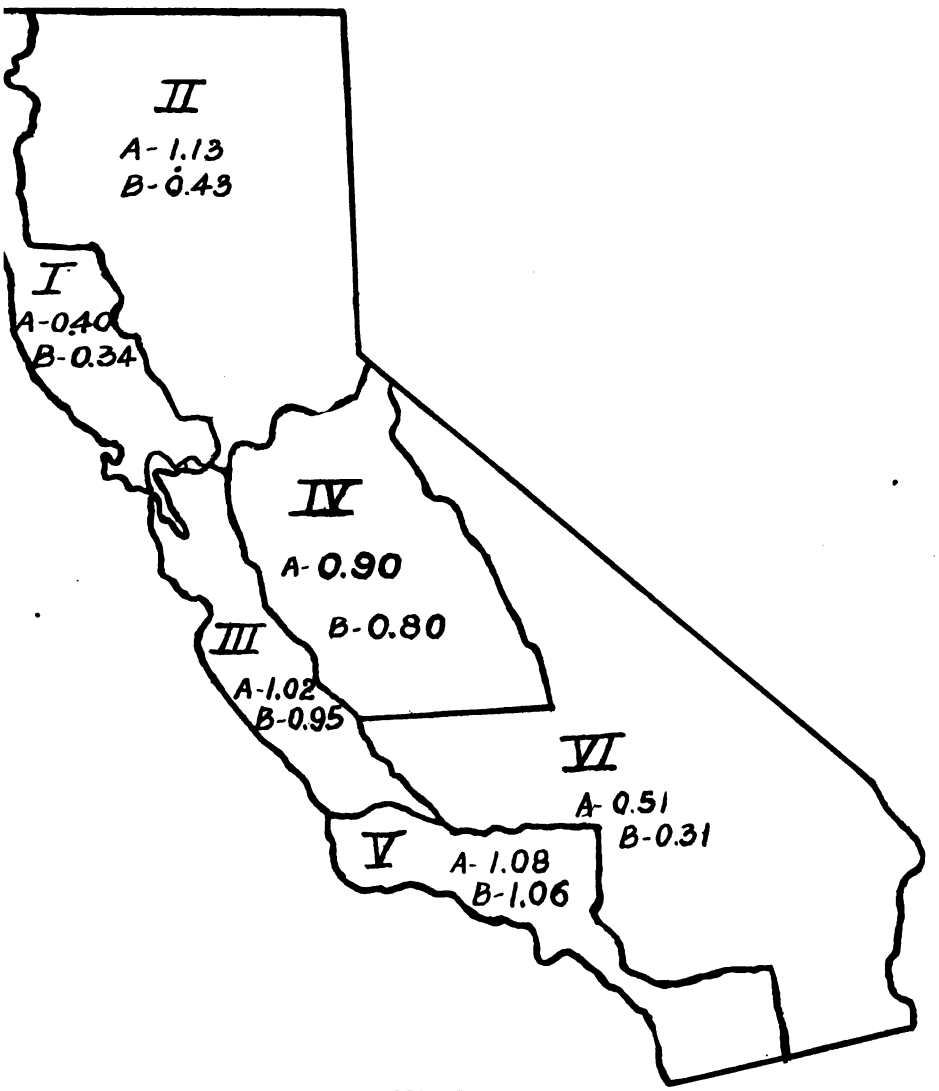
This map divides the state into the districts suggested for health districts by the State Board of Health.

The basis of rating by the State Board of Charities and Corrections was equipment only. In several of the institutions counted as "satisfactory" in making this map, the nursing and medical service was so bad as to make the institutions rank as "poor."

With the standard of five beds per thousand in mind the absolute inadequacy of this hospital accommodation is apparent.

Turning to the hospital equipment of the private hospitals a determined effort was made by the Commission to record the number of ward and private beds in all the private institutions of the state. Two hundred and fourteen of these hospitals were listed and statements were obtained from 186. (A detailed statement of this data, allocated to the various counties, will be found tabulated at the end of this section.) Adding to these beds of private hospitals, the free beds classed as satisfactory, a fair picture of the total hospital equipment of this state is obtained. The number of these beds per thousand of

*Chapter III. Section 2.


II
A- 1.13
B- 0.43
I
A-0.40
B-0.34
IV
A- 0.90
B-0.80
III
A-1.02
B-0.95
VI
A- 0.51
B-0.31
V
A- 1.08
B-1.06

MAP I.

population in the various districts of the state is indicated by the letter (a) in the map II. The letter (b) indicates the number of commercial beds.*

For the two million persons who represent the wage earners and their dependents in the State of California, ten thousand beds should be available to conform to standards. The total hospital equipment which must serve the needs of the entire population is only 11,066 beds. The great majority of these beds, 8,621 in number,* are found in private hospitals and are available only at a price which most wage earners can not afford to pay.

It is obvious from this statement of the hospital situation that many persons of small income who need hospital care must fail to receive it.

The Commission made every effort to discover the percentage of the beds of private hospitals occupied each month so as to find out to what extent these hospitals were running close to capacity. Responses received were very unsatisfactory. The method of management and record keeping in the California hospitals is such that few institutions could furnish definite information. Not even a useful estimate of the percentage of beds in constant use could be made.

Summary.

The comparatively small number of hospital beds that are really available to the wage earners under present conditions, points to the imperative need from the public health standpoint of bringing more decent hospital service within the reach of persons of small income.

The fact that the cost of hospital care is prohibitive to many persons who have no alternative except a request for charitable service points to the imperative need from the standpoint of social democracy, of providing a way by which good hospital care can be paid for by persons of small income.

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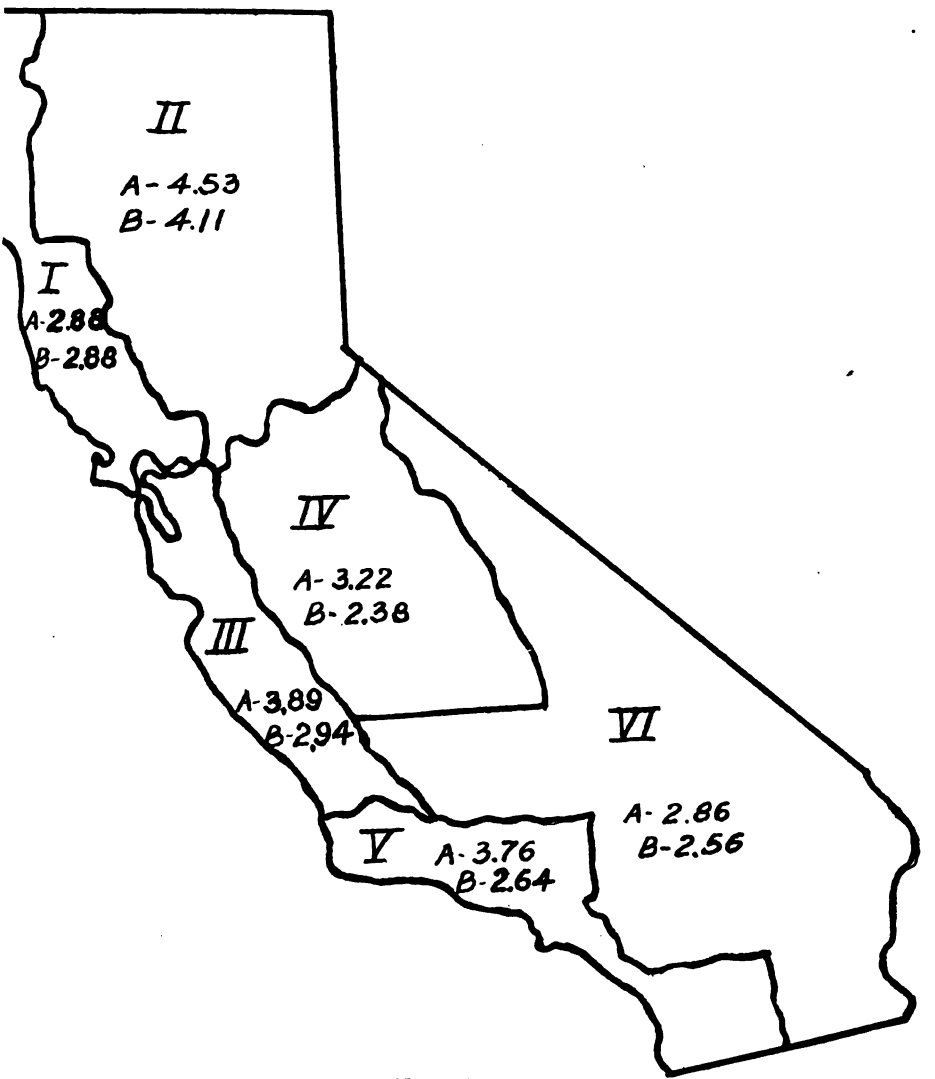
*The total number of beds for the hospitals responding, as listed above, is 7,725. To allow for the 28 hospitals not responding, 896 beds were added, making a total of 8,621 commercial hospital beds in the state. This adjustment was made on the assumption that the average of 32 hospital beds, found for those hospitals outside of Alameda, Los Angeles and San Francisco counties, was a fair estimate of the average size of the 28 hospitals not responding.


II
A-4.53
B-4.11
I
A-2.88
B-2.88
IV
A-3.22
B-2.38
III
A-3.89
B-2.94
VI
A-2.86
B-2.56
V
A-3.76
B-2.64

MAP II.

Hospital Beds in Private Hospitals Shown by Counties.

County	Population 1910	Population 1917 (adjusted 25%)	Actual number of beds	Number of beds per 1,000 popul'n
Alameda	246,131	307,664	630	2.05
Alpine	309	386	----------	----------
Amador	9,086	11,358	----------	----------
Butte	27,301	34,126	90	.79
Calaveras	9,171	11,464	----------	----------
Colusa	7,732	9,665	----------	----------
Contra Costa	31,674	39,598	----------	----------
Del Norte	2,417	3,021	----------	----------
El Dorado	7,492	9,365	21	2.24
Fresno	75,657	94,571	84	.89
Glenn	7,172	8,965	----------	----------
Humboldt	33,857	42,321	178	4.20
Imperial	13,591	16,989	----------	----------
Inyo	6,974	8,718	35	4.01
Kern	37,715	47,144	114	2.42
Kings	16,230	20,288	30	1.48
Lake	5,526	6,908	----------	----------
Lassen	4,802	6,003	54	9.00
Los Angeles	504,131	630,164	1,414	2.24
Madera	8,368	10,460	----------	----------
Marin	25,114	31,393	60	1.91
Mariposa	3,956	4,945	51	10.31
Mendocino	23,929	29,911	----------	----------
Merced	15,148	18,935	20	1.06
Modoc	6,191	7,739	8	1.03
Mono	2,042	2,553	----------	----------
Monterey	24,146	30,183	16	.53
Napa	19,800	24,750	167	.67
Nevada	14,955	18,694	32	1.71
Orange	34,436	43,045	63	1.46
Placer	18,237	22,796	208	9.12
Plumas	5,259	6,574	16	2.43
Riverside	34,696	43,370	40	.92
Sacramento	67,806	84,758	618	7.29
San Benito	8,041	10,051	16	1.59
San Bernardino	56,706	70,883	136	1.92
San Diego	61,665	77,081	375	4.87
San Francisco	416,912	521,140	1,866	3.58
San Joaquin	50,731	63,414	243	3.83
San Luis Obispo	19,386	24,325	58	2.38
San Mateo	26,585	33,231	121	3.64
Santa Barbara	27,738	34,673	139	4.01
Santa Clara	83,539	104,424	278	2.66
Santa Cruz	26,140	32,675	37	1.13
Shasta	18,920	23,650	40	1.69
Sierra	4,098	5,123	----------	----------
Siskiyou	18,801	23,501	37	1.57
Solano	27,559	34,449	32	.93
Sonoma	48,394	60,493	106	1.75
Stanislaus	22,522	28,153	96	3.43
Sutter	6,328	7,910	----------	----------
Tehama	11,401	14,251	----------	----------
Trinity	3,301	4,126	----------	----------
Tulare	35,440	44,300	28	.63
Tuolumne	9,979	12,474	57	4.57
Ventura	18,347	22,934	76	3.31
Yolo	13,926	17,408	----------	----------
Yuba	10,042	12,553	35	2.79

SECTION VII.

CONCLUSIONS.

Having examined the burden which illness brings to the individual wage earners and the burden which this illness spells to the public funds, having investigated the ways by which wage earners are seeking to protect themselves against the results of illness, as well as the efforts of employers to provide such protection for their men, with the facts of the field surveys analyzed and with the equipment of the hospitals and clinics of the state in mind—what are the conclusions that inevitably form themselves?

The cost of scientific medical attention and hospital service, beyond the means of most wage earners, is forcing an increasing number of persons to seek medical charity and financial assistance when ill. Loss of earnings due to illness reduces more wage earning families to destitution than any other cause. **Individual responsibility for illness threatens hardship and economic dependency to wage workers.**

The annual loss which the individual will suffer because of illness can not be foreseen. It may be nothing. It may be disastrously heavy. Yet the annual loss to the community consequent upon illness is a steady computable loss. The comparatively low sickness rate in California, an average of six days in contrast to nine days found by the Federal Public Health Service in other communities, would be a decided asset under a system of group responsibility. It means that the annual loss to the community due to illness is comparatively low and the pro rata cost of health insurance would be correspondingly low in California as compared with other communities. **Group responsibility for illness through health insurance is the practical way to meet the problems created by illness in California.**

Illness is a possibility, not a certainty, in the life of any individual, and most persons to whom every dollar counts, are inclined to rely on the chance of escaping. Though many wage earners, recognizing the advantages of health insurance, organize in various ways to protect themselves, the great majority of poorer paid wage earners, most in need of protection, will not voluntarily seek it. Even among persons of better earning capacity who are still in the group who can not afford a long illness, there are many who do not see the advantages of the insurance method. **Health insurance to be effective must be made compulsory upon the individual worker.**

An adequate protective system would guarantee the wage earner medical attention, including specialist care, surgical, hospital and

dental care for himself and his family in time of illness as well as a substantial part of wages for the maintenance of himself and family during his disability due to illness. The protection afforded by existing health insurance facilities, useful though it is, is not and can not be made adequate for what the wage earners can and do pay. **Some contribution from other sources than the wage earners themselves is necessary to secure adequate health insurance for wage earners.**

The greater part of the day is spent by the wage earner at his job. The conditions under which he works and which vitally affect his susceptibility to illness, are to a great extent under the control of his employer. The contribution by employers to the health insurance of their employees would give employers a financial incentive to make conditions at the job, as far as possible, conducive to good health. Thus prevention of disease, one of the desired ends of health insurance, would be stimulated.

Investigations made of the sickness rate in various industries by the Federal Public Health Service have convinced that body that the strain of modern industrial life contributes toward the general illness of the workers, so from the standpoint of partial responsibility, contribution from industry would be justified.

Furthermore (as, indeed, California employers who have experimented with health insurance funds at their own establishments, testify) health insurance of wage earners would react to the decided benefit of industry through increased efficiency and a steadying influence on the average duration of employment. And as indirect beneficiaries, the employing group rightfully should contribute. **Contribution from industry to the health insurance of wage earners is just and desirable.**

Since the community can control general conditions which affect the health of the wage earning group, it would be well for the community to have a direct financial interest in the bettering of conditions in place of the general interest it now has in public health; second, contribution of the state would give the state the right to regulate and to control, and cooperation between health insurance and other official bodies interested in public health could be then worked out to advantage; third, the contribution to a scheme calculated to prevent destitution, would be an admirable substitute for the present expenditure of large sums of public funds for the relief of distitution. **Contribution from the state to the health insurance of wage earners is desirable.**

The present *laissez faire* method of ignoring the great problem of illness among wage earning families until actual destitution demands public attention, is socially wasteful in the extreme. It means a

heavy financial burden on public funds for relief, which at best is a most unsatisfactory palliative of the disease of destitution.

Health insurance offers a sensible, practical method of eliminating in part the most distressing features of the present social system, economic dependency and charitable relief. Health insurance would distribute a burden which now means hardship, suffering and lavish public expenditure, in such a way that it would be a burden no longer.

Through its beneficial effect upon two-thirds of the population, health insurance would mean a tremendous gain in public health. **Health insurance of wage earners would mean a tremendous step forward in social progress.**

CHAPTER IV.

THE FIELD OF SOCIAL INSURANCE—A GENERAL REVIEW.

SECTION I.

INDUSTRIAL ACCIDENT INSURANCE OR COMPENSATION.

The Commission does not think it necessary at this time to go into an exhaustive discussion of the problem of compensation for industrial accidents. The problem is a familiar one to the people of the United States, and especially of the state of California. Already thirty-four jurisdictions within the United States have legislated on the subject more or less satisfactorily.

California, in 1911, was one of the first to enact an elective compensation act and again one of the first to adopt a special constitutional amendment in order to make a compulsory act possible. With the sole exception of the act of New York, and possibly Ohio, the benefits granted by the California Compensation Act are the most generous in the country. In the aggregate they are perhaps some 65 per cent greater than the corresponding benefit of many eastern states, as for instance New Jersey and Pennsylvania. The administration of the act is in the hands of an efficient commission, whose fairness is recognized by all parties concerned. The state has provided facilities for insurance through a state insurance fund, administered on principles of mutuality, to which every employer has recourse, if the price of insurance sold on commercial lines appears too high.

Compensation is an essential part of social insurance, with a wider spread and larger history than all the other branches, and has been in many countries the precursor of these other branches.

For a clearer and more comprehensive insight into the whole social insurance movement at least a general bird's-eye review of insurance against industrial accidents appears necessary. A plain chronological list of all the countries in which compensation laws have been enacted up to the present, will perhaps better than words demonstrate the almost universal adoption of this principle. In each case the first act is given. Subsequent enactments for purposes of revision, amendment, recodification, etc., are entirely too numerous to be listed here.

As far as information is available, 42 foreign countries and 34 states and territories in the United States have passed such acts.

Chronological List of Accident Compensation Acts.

Foreign.

1884 Germany	1902 Luxemburg	1910 Lichtenstein
1887 Austria	1903 New Brunswick	1910 Servia
1894 Norway	1903 Russia	1911 Tasmania
1895 Finland	1903 Belgium	1911 Peru
1897 Great Britain	1905 Cape of Good Hope	1911 Japan
1898 Denmark	1905 Queensland	1911 Switzerland
1898 Italy	1906 Nuevo Leon (Mex.)	1911 Saskatchewan
1898 France	1906 Venezuela	1911 Labrador
1900 Spain	1907 Hungary	1912 Roumania
1900 New Zealand	1907 Transvaal	1912 West Australia
1900 South Australia	1908 Alberta	1913 Portugal
1900 New South Wales	1908 Newfoundland	1914 Victoria
1901 Greece	1909 Bulgaria	1916 Ontario
1901 Netherlands	1909 Quebec	1916 Cuba
1901 Sweden	1910 Manitoba	
1902 British Columbia	1910 Nova Scotia	

United States.

1902 Maryland	1912 Michigan	1914 Maryland
1908 U. S. Gov. Employees	1912 Rhode Island	1914 Louisiana
1909 Montana	1912 Arizona	1915 Wyoming
1910 New York	1912 Canal Zone	1915 Indiana
1911 Kansas	1913 West Virginia	1915 Montana
1911 Washington	1913 Oregon	1915 Oklahoma
1911 New Jersey	1913 Nevada	1915 Maine
1911 California	1913 Texas	1915 Vermont
1911 New Hampshire	1913 Iowa	1915 Colorado
1911 Wisconsin	1913 Nebraska	1915 Hawaii
1911 Illinois	1913 Minnesota	1915 Pennsylvania
1911 Ohio	1913 Connecticut	1916 Kentucky
1911 Massachusetts	1913 New York	1916 Porto Rico

Of the 42 foreign acts only two passed before 1890, six in the decade 1890–1899, 21 in 1900–1909, and 13 in 1910–1916. Naturally the number is falling off, because there are few, if any, civilized countries in which the problem of compensation has not been met in some way or other.

In comparison the beginning of legislation in the United States has been very much delayed, but on the other hand the rapidity with which the movement has extended throughout the country is almost amazing. Not even counting the acts declared unconstitutional, the 34 acts have almost all been passed in five years, 1911–1916. One state legislated experimentally in 1909, and another 1910, eight followed in 1911, four in 1912, when few legislatures met, nine in 1913, two in 1914, ten in 1915, and one in 1916. Literally the compensation movement, once the need was recognized, swept the country.

CLASSIFICATION OF COMPENSATION AND INSURANCE SYSTEMS.

In American legislation on the subject a distinction is usually drawn between compensation and compensation insurance, the latter being considered as only one aspect of the compensation legislation. Under this distinction compensation describes the changed relations between employer and employee, while compensation insurance establishes a new relationship between the employer and the insurance company.

(1) The placing of the obligation to pay indemnity upon the individual employer is *compensation.*

(2) The obligatory insurance of the employer against industrial accidents is *accident insurance.*

This distinction recognizes the fact that when insurance is compulsory, the duty to pay the benefits established by the law falls directly upon the insurance carrier, and the liability of the employer is a contingency only.

Nevertheless in practice employers seldom retain their legal liability. The usual procedure is for them to reinsure it with a duly organized insurance carrier of some form, even if this is not required by the law. Compensation is thus transferred into insurance. Moreover, the very essence of the compensation legislation, making certain benefits payable upon the occurrence of certain events, is that of an insurance system, and this was clearly recognized in American legal discussions of compensation legislation, when the constitutional difficulty was raised that such acts made the employer an insurer of his employee.

From a theoretical point of view all compensation legislation must be classified as a branch of social insurance, the insurer being sometimes the industrial employer, sometimes a cooperative organization of employers, sometimes a mutual, and sometimes a stock insurance company, or as another alternative, the state.

It is in compensation, therefore, more than in any other branch of social insurance, that the competitive struggle of various forms of insurance organizations has had its play. European experience has created a broad division of all the acts into two groups—those with and without compulsory insurance.

In the United States the principle of compulsory insurance has evidently made much larger gains than is usually appreciated. In some form this principle of compulsory insurance is found in 22 states, though in 15 of these compensation itself is, in form at least, elective. In most of these states the pressure for election, or at least against nonelection, is so strong that they are substantially compulsory acts.

It is true that in 16 out of the 22 states, there is an alternative to insurance, described as "self insurance," which consists in the furnishing of evidence of financial solvency or stability, prerequisite to

exemption from insurance. This is almost altogether an American method of compensation. Netherlands is the only country in Europe which may show a precedent for this method.

A significant feature is the development of state insurance, not only in Europe but in this country.

Monopolistic state compensation insurance is found—

In Europe: Norway, Switzerland.

In United States: Ohio, Washington, Wyoming, Nevada, Oregon. West Virginia.

Competitive state compensation insurance is found—

In Europe: Italy, Netherlands, France, Sweden, Portugal.

In United States: Maryland, New York, California, Michigan, Colorado, Pennsylvania, Montana.

Altogether state compensation insurance is found in seven European countries and thirteen states in the Union.

The type of insurance carrier very popular in Europe but not known at all in this country, is the compulsory mutual association, found as the exclusive form in eight countries, and limited to certain industries only in three other states. In several of the countries these organizations when organized on territorial lines, very closely approach state insurance.

It is interesting to compare the development of state, mutual and private insurance in this field of compensation in the United States. In the *Spectator* for April, 1916, a table is given for 1913 and 1914:

	1913		1914	
	Premiums written	Per cent	Premiums written	Per cent
Casualty companies	$13,436,199	75.3	$30,865,136	72.8
Mutual companies	1,849,735	10.4	3,974,279	9.4
State funds	2,549,539	14.3	7,533,516	17.8
Totals	$17,835,473	100.0	$42,372,931	100.0

SECTION II.

HEALTH INSURANCE.

While all compensation legislation may be considered as a form of social insurance because it results from definite state action, the various forms of health insurance can not all be classed as social insurance. The substitution of the new term "social insurance" for the older one "Workingman's insurance" meant a broadening of the concept from one point of view. From another point of view it involved additional limitations. The insurance of workingmen against sickness may and does occur irrespective of any governmental action.

The presence of either financial governmental subsidy or the element of compulsion is essential, however, to social health insurance. Under this definition only two important countries in Europe, Italy and Spain, have made no provision for social health insurance. In the case of Italy the statement should be qualified with the comment that compulsory insurance has existed for railroad employees.

The following table will indicate the dates at which the European countries acquired health insurance systems, and the nature of the insurance:

Voluntary Subsidized

1891 Sweden
1892 Denmark
1894 Belgium
1898 France
1911 Switzerland

Compulsory.

1883 Germany
1884 Austria
1891 Hungary
1901 Luxemburg
1909 Norway
1910 Servia
1911 Great Britain
1912 Russia
1912 Roumania
1913 Netherlands

Also for Special Industries.

1894 France (Mining Industry)
1895 Italy (Railroads)
1898 France (Seamen)

Most of the health insurance acts do not prescribe the institution in which the insured workman must insure. A limited choice is as a rule permitted. In most countries a lower standard form of organization is recognized in which the workman must be insured if he has not selected some other alternative, and the selection between the various insurance institutions is often left, not to a single individual, but to a group of which he is a member.

In general the following forms of organization for insurance of workingmen against sickness have developed:

(1) The association of persons of a certain trade (in the old guild and the modern trade union), limited to a certain locality.

(2) A similar trade association not limited to a certain locality, as for instance a large trade union with branches, or the special organizations for miners or railroad employees.

(3) The association of persons irrespective of trade, in a certain locality—as a local friendly or mutual aid society.

(4) The association of persons irrespective of trade or locality—the larger mutual aid society.

(5) The establishment funds or factory funds consisting of employees of one factory or other industrial establishments.

The above types of insurance institutions are all of the cooperative or mutual type, organized and operated for mutual aid and not for profit. In addition to that there are or may be:

(6) Insurance against sickness through commercial (stock) insurance companies, and

(7) Direct state or commercial insurance organizations.

In studying the organization of sickness insurance in the various countries, two facts stand out with prominence:

(1) Under no health insurance systems are private and commercial companies permitted to compete with the nonprofit making carriers.

(2) Direct state insurance against sickness is almost equally rare.

On superficial examination it may appear that the British health insurance act is an exception since the commercial life insurance companies were permitted to organize nonprofit making "Societies" to operate under the law. Though obviously this line of activity was undertaken by the insurance companies to further their own business of life insurance among wageworkers, it should be noted that the "Society" has an independent corporate existence and that its accounts must be kept entirely separate from those of the parent concern. This seeming exception is explained at greater length in the description of the British health insurance system.

The nearest approach to a system of state insurance was the commercial insurance originally provided for by Germany for persons not insured in any other organization. This type of insurance was abolished, however, by the act of 1911.

The insurance institutions of Hungary and Roumania appear at first glance to be national insurance institutions, but closer examination shows them to be merely an agglomeration of many mutual units from the point of view both of organization and finances.

It should be emphasized that from the point of view of insurance organization health insurance differs radically from compensation. In

the latter, competition between the principles of state insurance, mutual insurance and private stock insurance appears to be the vital issue. In health insurance on the other hand, practically all the insurance is in the hands of mutual organizations, whether voluntary or compulsory, and any competition that exists lies in the comparative ratio of growth or decline of the various types of mutual organizations.

SECTION III.

MATERNITY INSURANCE.

Theoretically, maternity (or specifically the act of childbirth) need not necessarily be considered a condition of sickness unless it be accompanied by complications. Practically, however, it approaches sickness in that it always requires the attention of a physician (or at least a midwife, who renders what is a form of medical aid), as well as drugs and various surgical supplies, and also because it results in temporary incapacity or disability to perform remunerative labor. As a matter of fact, therefore, the ten compulsory sickness insurance systems of Europe contain provisions for maternity. A proper system of maternity insurance means, however, more than simply benefits required by childbirth. It means, also, a minimum cash benefit to cover the costs of the period of recuperation. The presence of the mother during the first weeks of life is a matter of vital importance.

In addition to the ten compulsory insurance acts with their specific maternity provisions, there is the special Italian system of compulsory insurance for maternity, established in the absence of any compulsory sickness insurance; and finally, state sudsidies in all maternity cases to women in need are given in accordance with recent acts in France and in Australia.

Compulsory—In conjunction with sickness insurance.

1883 Germany
1888 Australia
1891 Hungary
1901 Luxemburg
1909 Norway
1910 Servia
1911 Great Britain
1912 Russia
1912 Roumania

Compulsory—Independent systems.

1910 Italy

Voluntary subsidized.

1911 Switzerland

State pensions.

1910 Australia
1912 France

SECTION IV.

OLD AGE AND INVALIDITY INSURANCE.

National compulsory systems of old age insurance are more recent and less numerous than in other branches of social insurance. This, however, is not due to the lighter importance or disregard of the problem of old age, but to much greater difficulties of a technical character, especially when the condition of invalidity or permanent disability complicates the situation.

In a haphazard way mutual benefit societies in many countries, by gradual extension of the sickness benefit, drifted into invalidity insurance and even old age pensions, and not infrequently this practice created serious financial difficulties for the societies. To prevent such results, most sickness insurance laws (both compulsory and voluntary) prohibit the mutual insurance societies giving invalidity or old age annuities. As far as state activity is concerned, efforts to provide old age insurance, either through voluntary systems, or through compulsion for special industries only, antedate even the entire official history of social insurance which began in the early eighties.

In Germany the old age insurance was enacted several years later than the other two branches, and for many years the German system was popularly assumed to be the only one of its kind. The last five years, however, have seen a very remarkable development throughout Europe in that direction.

Evidently old age or invalidity insurance offers certain financial difficulties because it deals with cases of long duration requiring substantial payments, and therefore, long accumulation of funds. In view of these difficulties, at least three different methods have been evolved in dealing with the problem: compulsory insurance, voluntary subsidized insurance and old age pensions. If, then, all the three systems are included, the list becomes quite an imposing one.

Moreover, the list is far from complete as far as the funds of special industries are concerned, because information concerning them is difficult to obtain, and the few industries listed must be considered as

illustrations only of the familiarity with the compulsory method even outside of the countries with national acts of this character.

Compulsory old age and invalidity insurance

1889 Germany
1906 Austria (salaried employees only)
1910 France
1911 Luxemburg
1912 Roumania
1912 Sweden
1913 Netherlands

Also in special industries.

1884 Austria (Mining)
1885 Italy (Railroad)
1888 Russia (Railroad)
1894 France (Mining)
1898 France (Seafaring)
1909 France (Railroad)

Voluntary subsidized.

1850 France
1851 Belgium
1898 Italy
1908 Spain
1910 Servia

Old age pensions.

1891 Denmark
1898 New Zealand
1900 New South Wales
1901 Victoria
1907 France (includes invalidity)
1908 Australia (includes invalidity)
1908 Great Britain

Voluntary state insurance (without subsidies)

1864 Great Britain
1908 Canada

SECTION V.

UNEMPLOYMENT INSURANCE.

Comparatively little has as yet been accomplished in the field of unemployment insurance. In fact, for many years it was assumed that unemployment, because of its very indefinite character, was not, in technical language, an "insurable proposition"; that *voluntary* insurance must necessarily fail because of the adverse selection of risks, while compulsory insurance was unworkable because of the great danger of malingering. These impressions were strengthened by the failure of a very insignifiant experiment in compulsory insurance made in the small town of St. Gall, in Switzerland, in 1894.

But the obvious fact that numerous labor organizations were conducting out-of-work benefits (which is simply another term for unemployment insurance), successfully, forced the reconsideration of the accepted point of view. An experiment in the Belgium city of Ghent, for which Mr. Louis Varlez is largely responsible, in municipal subsidies to trade union unemployment funds, achieved a certain success and led to the extension of the Ghent system throughout many cities in several European countries. Out of these municipal experiments grew national acts, shaped more or less on the Ghent plan, until finally the British government made the bold experiment of establishing unemployment insurance on national lines, though for a few trades only.

Notwithstanding the recent character of the movement for unemployment insurance, the list of measures passed, or at least experiments being tried out, is not an insignificant one.

Compulsory insurance.

1911 Great Britain

Voluntary subsidized.

1905 France
1905 Norway
1907 Denmark
1907 Belgium

Unemployment insurance has also been established in numerous municipalities and communes at various dates, but notably during the last ten years, in:

Belgium (over 40 communes)
Germany (about 12 cities)
Holland (about 25 cities and communes)
Italy (5 or 6 cities)
Switzerland (3 or 4 cities)

Here, again, we find one distinct type of insurance organization predominating. Side by side with the employers mutual in compensation, the local mutual aid society in sickness, the state institution in old age insurance, the trade union out-of-work fund in unemployment has become the dominating type. There are, however, some exceptions. The British system is one of state insurance, but to a large extent the trade unions serve under it as agencies with which the insured persons deal. Again, in a few German and one or two Italian and French cities direct municipal insurance systems exist to a very limited extent. In so far as the last form of unemployment insurance is still on trial, the choice lies between straight state insurance and trade union organizations.

SECTION VI.

LIFE INSURANCE.

Life insurance—by which is meant an insurance against the economic effects of death of the breadwinner—has been the last to develop in any scheme of social insurance, and as yet very little has been accomplished. But efforts to meet the problem are many.

The economic consequences of death may be analyzed as those immediately connected with the cost of the last illness and the funeral, and the more remote consequences to survivors who have been dependent upon the deceased for support. The immediate needs may appear more pressing, but in the final analysis the problem of the dependent survivors, largely of the widow and orphans, is vastly more serious.

Life insurance as sold by private insurance companies, whether stock or mutual, is almost universal among persons whose incomes are higher than the average. Cooperative, so-called fraternal insurance, usually on an assessment plan, is also fairly extensively used among wageworkers, but is far from universal, and being often without a sound actuarial basis is not always altogether secure. In many industrial countries special forms of commercial life insurance are very popular among the wageworkers. In some localities practically all wageworkers carry some insurance of this kind. It helps effectively to meet the immediate problems of death, but accomplishes almost nothing towards the solution of the more remote but graver difficulties. Efforts at life insurance in the general program of social insurance, are directed, as they should be at relieving the distress of widows and orphans. To some extent other branches of social insurance are already doing this.

The problem of funeral expenses is met partly by accident compensation and partly by sickness insurance. Death usually occurs as a result of sickness or accidental injury. With few exceptions European and American compensation laws provide for funeral expenses. All compulsory sickness insurance acts (except that of England) require funeral benefits as an essential part of the minimum benefits of the funds.

If death occurs as a result of an industrial accident, the more remote effects on the dependents are met more or less satisfactorily under a few laws, by lump sums; and under most by continuing cash benefits to widows, children, and sometimes other dependents, either for a limited time or during the entire time of dependency.

It is natural that the attention of social insurance theory should be

directed towards the problem of death when not due to industrial accident. The prevalence of life insurance among persons of better incomes points to the developing of a similar system, but at lower cost, for wageworkers. The much more satisfactory results under the compensation system of continuing payments to survivors, argues for such a system rather than a lump sum payment at death. Early experiments were directed on the line of lump sum insurance, and more modern legislation endeavors to meet the need of dependents by survivors' pensions. The lump sum insurance method offers the dangers that large sums in the hands of inexperienced beneficiaries always present.

Following is the list of the more important measures dealing with life insurance directly or by the modified way of widows and orphans pensions:

Voluntary state life insurance.

1864 Great Britain
1850 France

Compulsory widows' and orphans' pensions.

1910 France (for a brief period of 6 months only)
1911 Germany

Children's pensions and orphans' aid.

1911 Missouri	1913 Minnesota	1913 Pennsylvania
1911 Illinois	1913 Nebraska	1913 South Dakota
1912 Colorado	1913 Nevada	1913 Utah
1913 California	1913 New Hampshire	1913 Washington
1913 Idaho	1913 New Jersey	1913 Wisconsin
1913 Iowa	1913 Ohio	
1913 Massachusetts	1913 Oklahoma	1911 New Zealand
1913 Michigan	1913 Oregon	1913 Denmark

While the two foreign mothers' pension acts of Denmark and New Zealand are definitely granted to widows only, in each case on account of their children, many of the American acts include children whose father may be alive but disabled, or whose fathers may have abandoned them. Nevertheless, the bulk of relief under this act falls to widows and their inclusion under this caption is justifiable.

SECTION VII.

PRINCIPLES OF DISTRIBUTION OF COST.

The four main forms of governmental activity in which the policy of social insurance usually expresses itself are:

1. The creation of governmental insurance institutions.
2. Financial subsidy.
3. Shifting of financial burden.
4. Compulsion.

And while seldom all these four forms of activity are exercised together, participation of the government is essential to "social insurance."

In the foregoing discussion emphasis was laid on the form of insurance and the principle of compulsion. It seems worth while to review the entire field primarily from the point of view of the shifting of the cost.

Compensation for Industrial Accidents and Diseases.

In regard to compensation the problem is a simple one. Practically without exception the compensation is entirely at the expense of the employers, or the industry.

The important exception is the custom of several European acts of placing the burden of compensation during a certain preliminary period upon the sickness insurance system to which the workmen contribute a very substantial and sometimes a greater part of the cost, though in all such cases employers contribute to the cost of sickness insurance, and the cost of caring for the accidents is considerably lower than the amount of the employers' contribution to the sickness fund. This period equals 13 weeks in Germany, Russia and Denmark (in the latter there is no compulsory sickness insurance and the situation approaches that of a long waiting period), ten weeks in Hungary, 60 days in Sweden (no compulsory sickness insurance), and four weeks in Austria and Norway. In some of the countries this period is not very much longer than is, for instance, the waiting period, for which no compensation at all is paid (as, for instance, Colorado, three weeks). Of course, in so far as the amount of compensation in no case equals the total amount of loss, it may be said that in all countries the workingmen share in the cost of industrial accidents.

Health or Sickness Insurance.

The data may best be presented separately for compulsory and voluntary systems.

	Contributions by the—		
	State	Employer	Employee
Compulsory systems.			
Germany	No	Yes	Yes
Austria	No	Yes	Yes
Hungary	No	Yes	Yes
Luxemburg	No	Yes	Yes
Norway	Yes[1]	Yes	Yes
Servia	Yes	Yes	Yes
Roumania	No	No	Yes
Russia	No	Yes	Yes
Great Britain	Yes	Yes	Yes
Netherlands	No	Yes	Yes
Voluntary subsidized.			
Denmark	Yes	No	Yes
Sweden	Yes	No	Yes
France	Yes	No	Yes
Belgium	Yes	No	Yes
Switzerland	Yes	No	Yes

[1]Also the commune.

The state subsidy is a feature of the voluntary systems, and the employers' contribution a feature of the compulsory systems. To the latter rule the law of Roumania is the only exception, and on the other hand many recent acts show a tendency to combine contributions from employers and state in the compulsory system (Norway 1909, Servia 1910, Great Britain 1911).

Maternity Insurance.

Since practically all the sickness insurance systems, especially the compulsory ones, and also those of Denmark and Switzerland contain the maternity insurance as a branch of its activity, the table given above will largely apply to maternity insurance. To this may be added the following acts:

	Contributions by the—		
	State	Employer	Employee
Italy (special compulsory act)	Yes	Yes	Yes
France (gratuitous pensions)	Yes[1]	No	No
Australia (gratuitous pensions)	Yes	No	No

[1]Also the commune.

Old Age and Invalidity Insurance.

	Contributions by the—		
	State	Employer	Employee
Compulsory systems.			
Germany	Yes	Yes	Yes
Australia	Yes	Yes	Yes
France	Yes	Yes	Yes
Sweden	Yes	Yes	Yes
Roumania	Yes	Yes	Yes
Luxemburg	Yes	Yes	Yes
Netherlands	Yes	Yes	Yes
Voluntary subsidized.			
France	Yes	No	Yes
Italy	Yes	No	Yes
Belgium	Yes	No	Yes
Spain	Yes	No	Yes
Servia	Yes	Yes	Yes
Pensions.			
Denmark[1]	Yes	No	No
France[1]	Yes	No	No
Great Britain	Yes	No	No
Australia	Yes	No	No
New Zealand	Yes	No	No

[1]Communes bear part of the cost.

The three types are very well defined. All compulsory old age and invalidity schemes divide the cost some way among the three parties concerned. In the case of Roumania it is worth while noticing that this principle of division of cost has been adopted even though in compulsory sickness insurance the entire cost is placed upon the wage-workers themselves.

In the voluntary subsidized schemes the state assumes part of the cost, but the employers can not be taxed. The only exception to this rule is the case of Servia. Just how the employer is to be reached in the case of voluntary scheme does not quite appear from the law, except that as the workingmen's insurance associations are authorized to carry this form of insurance, and as employers are represented in the management of those associations, the old age and invalidity insurance would only be affected when both employers and employees would agree to share the cost. In this case we are dealing with insurance that would be voluntary as far as a certain group of wageworkers is concerned, but compulsory for individuals within that group.

Unemployment.

In general, the same principle governs as in sickness insurance. In the only compulsory unemployment insurance system—the English—contributions from both employers and the state are required, while the voluntary systems carry with them a public subsidy.

	Contributions by the—			
	State	Local government	Employer	Employee
Compulsory system.				
Great Britain	Yes	No	Yes	Yes
Voluntary systems.				
Belgium	Yes	Yes	Yes	Yes
France	Yes	Yes	No	Yes
Denmark	Yes	No	No	Yes
Norway	Yes	No	No	Yes
German cities	No	Yes	No	Yes
Dutch cities	No	Yes	No	Yes
Italian cities	No	Yes	No	Yes
Swiss cities	No	Yes	No	Yes

Life Insurance and Widows and Orphans Pensions.

	Contributions by the—			
	State	Local government	Employer	Employee
Compulsory systems.				
Germany	Yes	No	Yes	Yes
France	Yes	No	Yes	Yes
Netherlands	No	No	Yes	Yes
Voluntary systems.				
France	Yes	No	No	Yes
Great Britain	No	No	No	Yes
Canada	No	No	No	Yes
Massachusetts	Yes	No	No	Yes
Wisconsin	No	No	No	Yes
Pension systems.				
Denmark	Yes	Yes	No	No
New Zealand	Yes	No	No	No
California	Yes	Yes	No	No
Massachusetts	Yes	Yes	No	No
Pennsylvania	Yes	Yes	No	No
Wisconsin	Yes	Yes	No	No
All other states of the Union	No	Yes	No	No

In voluntary life insurance the cost is supposedly chargeable entirely to the insured. There is, however, a hidden subsidy in some cases through the state assuming part of all the cost of administrations. In

the various systems of pensions to widows on account of surviving children, the line of demarcation is between those comparatively few acts which make the central government assume the entire cost and those which place the entire burden upon the purse of the locality (city, county or commune) and finally those acts which endeavor to force both jurisdictions to participate in the cost.

CHAPTER V.

HEALTH INSURANCE IN EUROPE.

PART I. COMPULSORY SYSTEMS.

PART II. VOLUNTARY SUBSIDIZED SYSTEMS.

PART I.
COMPULSORY SYSTEMS.

SECTION I.
GERMANY.

It is definitely recognized that the modern social insurance movement began with German legislation in the early '80s. It is more difficult to assign the origin of the German insurance legislation to any definite period. The political development of social insurance may be traced back in Germany to the early '70s. The first laws in the field of social insurance, the early bill of 1881 and the sickness insurance and accident insurance acts of 1883 and 1884, were themselves but an adaptation of existing institutions in the states composing the empire. Back of this political development there was a more fundamental growth of workingmen's insurance. Mutual insurance among wage-workers within the present boundaries of the German empire is practically as old as is the system of wage labor itself.

The form of organization of the original mutual societies was varied. There were guilds which provided sick benefits for master workmen. Sick benefit funds were gradually organized in connection with many larger industrial establishments, and in the second half of the century many voluntary benefit societies were formed more or less on the model of the English friendly societies. The continued activity of all the various benefit societies was not inconsiderable. In 1876, when an imperial act for the registration and control of these societies was passed, the number of organizations was estimated at some 12,000 and their membership at 2,000,000.

Still more significant is the gradual development, not only of voluntary mutual insurance, but also of those elements which go to make up a system of social insurance. In a general way they are: compulsion; enforcement of contribution from the employers; and state subsidy, though all the three principles are not necessarily present in every social insurance plan. Every one of these three principles has been in force in the legislation of various German states for decades before the so-called first social insurance law was enacted in 1883. One of the earliest general laws relating to compulsory insurance against sickness was adopted in Prussia in 1845, authorizing communes to require apprentices to join sick benefit organizations. Later laws of a similar character were enacted in several other German states. Brunswick, Saxony, Bavaria, Baden, Wurtemburg and Hanover had such compulsory legislation in some form or other.

The principle of a compulsory contribution from employers was recognized by a Prussian law in 1849, which authorized communes to require employers to create sick benefit funds for their employees and to assume part of the cost. A further extension of the principle of compulsory sickness insurance was contained in the German industrial code of 1869. Even direct insurance of wageworkers by the communal authorities with subsidies from public funds was established in several states in the '70s.

Perhaps the main difference between these earlier enactments and the system of health insurance inaugurated in 1883 was that the exercise of the powers of compulsion in the former was left to local authorities.

The national system of sickness insurance was established by the act of June 15, 1883, with many limitations, on somewhat experimental lines. It developed through much additional legislation, extending the application of the act to new groups, or modifying and broadening its provisions, until in 1911 a final recodification of all the existing legislation was promulgated. The most important acts are those of May 28, 1885, covering certain groups of wageworkers; the act of April 10, 1892, making further extensions and also certain other modifications; the act of June 30, 1900, permitting the inclusion of home-working (or sweated) industries through governmental decree; and the act of May 25, 1903, which among other changes, broadening the service of the sickness insurance, increased the minimum duration of benefits from 13 to 26 weeks. The general insurance code of July 19, 1911, at present in force, brought together all existing social insurance legislation and made various further extensions in the application of the sickness insurance system.

Extent of Compulsory Insurance.

The extent of application of the compulsory system of sickness insurance was a gradual growth. The original act of 1883 applied to all workingmen and technical employees in mines, quarries, factories and other industrial concerns. The act of 1885 extended it to inland transportation, and made special provision for employees of government railways, post and telegraph service. The act of 1892 added employees of commercial establishments, in offices of attorneys and notaries, and officials of the various social insurance institutions, also the office force of the postal and telegraph administration.

The largest extension was accomplished by the code of 1911, which substituted for the weighty enumerations of the earlier acts, a briefer but much broader classification. The main groups for the first time included in the national compulsory sickness insurance system in 1911 were the laborers in agriculture and forestry, about 3,000,000; domestic servants, 1,100,000; casual laborers, 400,000; out-workers, 300,000;

and various other minor groups of professional and semiprofessional employees, such as druggists, teachers, members of theatrical companies, etc., 250,000; giving a total of over 5,000,000 persons covered by the new law.

The system as in force at present covers:

1. Workmen, assistants, journeymen, apprentices, and servants.
2. Establishment officials, foremen and other employees in similar positions.
3. Clerks and apprentices in commercial establishments and pharmacies.
4. Members of theatrical companies and orchestras.
5. Teachers and tutors.
6. Out-workers (or home workers).
7. Crews of sea-going vessels, not otherwise provided for; and crews of vessels in inland transportation.

For the groups 2 to 5 in the above list, which cover commercial and professional pursuits, a further limitation exists exempting from the compulsory insurance persons earning over 2,500 marks ($595) per annum.

The intent of the law is evidently to include all wageworkers at manual labor and small-salaried employees in so far as they can be conveniently reached for the enforcement of compulsion through their employers. A few minor groups are specifically excepted from the compulsory system. It does not seem necessary to enumerate them in detail. In general these are groups either provided for in another manner, such as government employees in military service temporarily engaged in civil employment, or persons teaching without remuneration, while learning their occupation.

The importance of these exceptions is further neutralized by the system of voluntary insurance which is connected with the compulsory system. The privilege of voluntary insurance is extended to:

1. All employees receiving not over 2,500 marks ($595), who are not under compulsion to insure.
2. Members of the family of the employer employed in his establishment without any remuneration.
3. Small employers with not over two employees subject to insurance.

The provisions for voluntary insurance are not all a dead letter. While complete statistics on this point are lacking, data for several large city funds seem to indicate that voluntary members constitute some 8 per cent of the total insured membership, or about nine voluntary members for each 100 compulsory members. With a total of some 14,000,000 or 15,000,000 insured, this would indicate about 1,200,000 voluntary members.

The gradual extension of voluntary insurance is best shown by the following statement of the number of persons insured since 1885:

Year	Male	Female	Total
1885	3,515,275	778,898	4,294,173
1890	5,266,319	1,313,220	6,579,539
1895	5,838,195	1,690,326	7,525,524
1900	7,313,855	2,206,908	9,520,763
1905	8,349,779	2,834,697	11,184,476
1910	10,291,532	3,663,441	13,954,973
1911	Not available		14,518,760
1912	Not available		[1]14,150,582
1913	Not available		[1]14,555,669

[1]Exclusive of members of mutual aid society, about 1,000,000.

The membership constituted in 1910 about 21.5 per cent of the total population of the empire, and 49.7 per cent of the population gainfully employed. It is impossible from the data at hand to determine the actual increase because of the extensions of 1911; moreover the disturbances of the population due to the war, make any statistical estimates at present exceedingly unreliable. If the increase had actually amounted to the full five million, the proportion to the population would be some 30 per cent and to the gainfully employed population over 67 per cent.

Organization of Insurance.

The German system of sickness insurance for workmen has often been referred to in American publications as "State Insurance." Except in a very general way this description is altogether inaccurate. The machinery for carrying on sickness insurance is altogether of a mutual character. Even the one type of insurance through the medium of local governmental authority (to be referred to presently) has been abolished by the code of 1911. As the comparative advantages of state, commercial and industrial insurance form a subject of much discussion in this country, it will be necessary to describe the organization of insurance carriers in some detail.

German theory of compulsory social insurance recognizes two types known as "Zwangsversicherung" and "Versicherungszwang"—"compulsory insurance" and "compulsion to insure." The distinction is not only a verbal one. The former implies compulsion to insure in a prescribed institution, and the latter compulsion to insure with freedom of selection of the carrier.

The organization of sickness insurance in Germany presents a process of gradual transition from "Versicherungszwang" to "Zwangsversicherung," the freedom of selection of the insurance carrier having been narrowed down considerably.

When the first law was passed, the government endeavored to utilize

existing institutions as far as possible, only requiring the adoption of the legal minimum scale of benefits. These were:

1. The miners' funds (Knappschaftskassen).
2. Factory funds, or establishment funds (Betriebskrankenkassen).
3. Guild fund (Innungskrankenkassen) existing for the organized handicrafts under the industrial code.
4-5. Two groups of free mutual aid or friendly societies (Hilfskassen) registered either under the imperial act of 1876 (Eingeschriebene Hilfskassen), or established under various state laws (Landesrechtliche Hilfskassen).
6. Communal (or parochial) sickness insurance (Gemeinde Krankenversicherung) operated strictly through the local governmental authorities.

The multiplicity of these organizations may appear somewhat confusing at first glance, until it is remembered that, with the exception of the last form of communal insurance, all these forms of organization of workmen's insurance exist in this country as well—in establishment funds, trade funds, usually administered by unions, and fraternal societies of local or national character.

To these existing organizations were added by the law, two new types:

Builders' funds (Bannkrankenkassen) which are practically temporary establishment funds, made necessary by the temporary character of building operations and the high hazard of the industry, and finally

Local funds (Ortskrankenkassen) local organizations either on trade lines or without any trade distinction, but in either case including employees of many employers.

These were organized to offer an insurance medium for groups or individuals heretofore unprovided for, but in course of time local funds became the most important of all other forms as the following table will indicate:

In 1000 Members.

	1885		1893		1898		1903	
	Members	Per cent	Members	Per cent	Members	Per cent	Members	Per cent
Communal	587	13.7	1,237	17.1	1,410	15.6	1,499	14.3
Local	1,535	35.7	3,240	44.7	4,079	45.9	4,975	48.6
Factory	1,261	29.4	1,783	26.1	2,280	27.0	2,574	26.0
Building	12	.3	31	.3	18	.1	16	.1
Guild	25	.6	91	1.1	159	1.6	231	2.2
Mutual aid	731	17.0	662	9.8	766	9.1	887	8.4
State mutual aid	144	3.3	63	.9	57	.7	42	.4
Totals	4,295	100.0	7,107	100.0	8,770	100.0	10,224	100.0
Mining	377		468		556		685	
Grand totals	4,672		7,675		9,326		10,909	

In 1000 Members.

	1908		1910		1913	
	Members	Per cent	Members	Per cent	Members	Per cent
Communal	1,588	12.7	1,672	12.8	1,738	12.9
Local	6,320	51.1	6,846	52.4	7,739	57.0
Factory	3,174	26.0	3,274	25.0	3,711	27.3
Building	24	.1	17	.1	10	.1
Guild	269	2.1	296	2.3	368	2.7
Mutual aid	913	7.7	928	7.1	.....	.....
State mutual aid	36	.3	36	.3	.....	.....
Totals	12,324	100.0	13,069	100.0	13,566	100.0
Mining	865	.....	886	.....	989	.....
Grand totals	13,189	.....	13,955	.....	14,555	.....

This development took place through the comparative number of organizations and has remained about the same during the entire 30 years. The various funds in 1885, 1910 and 1913 were as follows:

In 1000 Members.

	1885		1910		1913	
	Members	Per cent	Members	Per cent	Members	Per cent
Communal	7,125	37.2	8 217	35.1	8,033	37.4
Local	3,700	19.3	4,752	20.4	4,678	21.8
Factory	5,500	28.8	7,957	34.0	7,699	35.9
Building	101	.5	46	.2	26	.1
Guild	224	1.2	818	3.5	906	4.1
Mutual aid	1,818	9.5	1,232	5.4	*	.....
State mutual aid	474	2.5	136	.6	*	.....
Mining	195	1.0	166	.8	150	.7
	19,137	100.0	23,354	100.0	21,492	100.0

*Not included in statistics.

The local funds have grown in the average number of their membership from 415 in 1885 to 1,440 in 1910. A similar growth in the average membership of other funds has taken place, though not to such a degree, the average membership of all funds increasing from some 240 to 600.

The organizational changes introduced by the code of 1911 are substantial. The local and factory funds are recognized as the standard, because they are the most efficient types of compulsory sick insurance. The mutual aid funds have not been abolished, but the organization of new funds of this character has been discontinued. A minimum membership requirement of 1,000 is destined to further discourage insurance in these funds under the law. They are known as substitute funds, and their function under the present system is of secondary importance.

Another even more radical change has been the elimination of direct communal insurance and the creation in its stead of a new type of local

funds for agricultural laborers, domestic servants, persons in casual labor or in home industry, that is, certain groups, largely of an agricultural class, the evident purpose being to protect the old "local funds" against the difficulty of insuring these groups of low paid labor.

Benefits Given.

In accordance with the underlying principle of local autonomy under careful central supervision, the law requires that certain minimum benefits be granted, and allows considerable latitude in the extension of these benefits within limits prescribed.

The four essential benefits provided are:

1. Medical aid.
2. A money benefit.
3. Maternity benefit.
4. Funeral benefit.

The medical aid must include at least the services of an attending physician, drugs and ordinary surgical supplies; appliances, trusses and glasses are specifically included. Medical aid is given without any restriction from the beginning of sickness, during all the period of insurance, and during 26 weeks of continuous disability.

The standard money benefit is 50 per cent of the wages, though not the actual wage, but a standard wage is meant. The insured are classified into different wage groups but the basic wage in any group can not exceed five marks ($1.19) per diem. The maximum normal sick benefit is therefore 60 cents per day. This benefit is granted from the fourth day of disability up to 26 weeks.

The required maternity benefit is given to insured women and equals the amount of the sick benefit for eight weeks, six of which must be after the confinement. This is in lieu of and not in addition to the medical aid and money benefit for sickness.

The funeral benefit in case of death of the insured equals 20 times the basic wage.

But while these four forms of benefits constitute the legal minimum required by the sickness insurance funds, they give a very inadequate conception of the entire service rendered. In various ways the insurance may and does extend the minimum amounts, and within the prescribed limits of the acts establishes even other benefits dealing with sickness.

These so-called optional benefits may be classified as follows:

1. Increase of compulsory benefits.
   (*a*) Increase of sick benefits up to 75 per cent of wages.
   (*b*) Grant for Sundays and holidays.
   (*c*) Extension of sick benefits up to 52 weeks.

(*d*) Reduction or abolition of waiting period in all cases, or only in cases of industrial accidents, or in cases lasting over one week.
(*e*) Increase of benefit payable to family when insured receives hospital treatment, from one-half to the full amount of the sick benefit.
(*f*) Increase of funeral benefit, up to 40 times the daily wage.
(*g*) Increase of minimum for funeral benefits to 50 marks ($11.90).

2. New benefits.
(*a*) Hospital treatment.
(*b*) Nurses' attendance.
(*c*) Appliances to prevent disfigurement or deformity.
(*d*) Grant of special diets.
(*e*) Grant of other therapeutic means.
(*f*) Sick benefits (up to one-half of the regular sick benefit) to insured persons under treatment in hospitals.
(*g*) Pregnancy benefits up to six weeks.
(*h*) Medical treatment for ailments due to pregnancy.
(*i*) Nursing benefits (or motherhood benefits) up to 12 weeks after confinement.
(*j*) Convalescent care up to one year after illness.

3. Extension of benefits to dependents.
(*a*) Medical treatment to dependent family.
(*b*) Maternity benefit to wife of insured.
(*c*) Funeral benefits for death of consort or child.

Many of the funds, and especially the larger ones in the large cities, have embodied some of these permitted extensions, of which the most important are the increase of the money benefit above the legal minimum of 50 per cent, the extension of both the medical and money benefit beyond the minimum of 26 weeks, the establishment of a compulsory hospital benefit, which is not specifically required by the law, increase of the duration of the maternity benefits, convalescent care and extension of the medical, maternity and funeral benefits to the immediate family of the insured. This very wide utilization of the possibilities of democratic management of the fund (to be explained more fully presently) is a very significant feature of the development of health insurance in Germany. Concerning one or two of these features accurate information is available. The minimum duration of benefits under the original law was 13 weeks. By the act of 1903 this was increased to 26 weeks. In point of the number of weeks for which cash benefits are given, the great majority of the funds have not exceeded the minimum requirements.

Increase of the weekly benefit over the minimum amount is much

more frequent. The following table shows the per cent of the number of funds which have gone beyond the minimum per cent of wages:

	1888			1910		
	50 %	50 % to 66 2/3 %	66 2/3 % to 75 %	50 %	50 % to 66 2/3 %	66 2/3 % to 75 %
Communal	100.0			99.8	.1	.1
Local	92.1	5.7	2.2	83.0	14.6	2.4
Factory	89.8	7.5	2.7	79.8	16.2	4.0
Building	96.3	.7	3.0	95.6	2.2	2.2
Guild	86.0	10.0	4.0	79.2	17.0	3.8
All funds	94.7	3.9	1.4	88.1	9.8	2.1
All funds without communal	90.7	6.8	2.5	80.9	15.7	3.4

Detailed information concerning some of the extensions by large funds is given in I. G. Gibbon's Study of Medical Benefits in Germany and Denmark (page 278), for 28 large local funds, with a combined membership of 1,100,000. Eighteen of these funds paid sick benefits of 50 per cent, one 55 per cent, one 58½ per cent, six 60 per cent, and one 62½ per cent. In two funds the waiting period was reduced to two days, and in five funds to one day. One fund extended the period of money benefits to 34 weeks, two to 39 weeks, and three to 52 weeks. Ten funds provided convalescent homes, and eight had day convalescent resorts. Twenty-one out of these 28 funds granted medical aid to the members of the family, and 12 gave drugs as well. Seventeen funds have provided funeral benefits in case of death of the wife, and of these, 15 also paid the funeral expenses in case of death of children.

The financial basis of the German sickness insurance system has not been changed throughout the 30 years of its existence. The cost is distributed between the employers and the employees, the former paying one-third and the latter two-thirds. Ostensibly no direct financial subsidy is granted by the public purse. Indirectly the imperial, state or communal authorities assume a certain part of the cost of the system. The central authorities pay for the supervision of the system. A large amount of treatment is given to insured persons in public hospitals for charges greatly below cost. Under the direct communal insurance, abolished by the act of 1911, deficits frequently developed which were assumed by the public authorities.

There had been considerable agitation for increasing the employers' contribution to equal that of the insured employees, or one-half of the whole cost, when the codification of the insurance acts was discussed, but this change did not materialize. It is said that the insured employees preferred to pay two-thirds of the cost and retain two-thirds of the voting power in the management of the funds.

As far as the mutual aid funds are concerned, which are entirely under the control of their membership, no subsidy is granted by the

employer, and the workmen who prefer them to any of the regular carriers must bear the entire cost. This, of course, holds true of the voluntary insured members in any of the funds.

The actual amounts are not, however, specified in the law, and considerable latitude is allowed to the individual funds. It is recognized that the amount of contributions must vary as the cost varies, and that the latter is affected not only by the extent to which the funds go into the optional benefits, but also by local variations of climatic and sanitary character, and differences in age, sex and occupational distribution of membership.

The contributions by employer and employee must be fixed as a percentage of the basic wages, and the normal maximum established is 4½ per cent. Beyond this amount, an increase requires the concurrent decisions of both the employers and the employees separately voting on the administration board of the carrier unless such an increase is necessary for the purpose of providing the regular (or minimum) benefits. Even in the latter case such a concurrent agreement is necessary to increase the total contribution above 6 per cent, this emergency arising but seldom. In fact, no funds charging above 6 per cent are found in the statistical reports, over 60 per cent of the funds charging from 2 to 4½ per cent.

There has been some increase in the cost because of the material increase in the minimum benefits in 1903, the growing cost of medical aid and the larger exercise of the power to grant additional benefits:

Funds charging—	1888, per cent.	1913, per cent.
1 to 1½ per cent of wages	49.7	21.5
1½ to 2 per cent of wages	20.1	16.2
2 to 3 per cent of wages	28.3	40.8
3 to 4½ per cent of wages	1.9	19.8
4½ to 6 per cent of wages	-------	1.7

The most frequently used ratio of contribution is therefore from 2 to 3 per cent. The contributions are highest in the local funds, which as a rule give the largest service, and lowest in the communal insurance, now replaced by the rural funds which deal with the lowest paid employees:

Rate of Dues in 1912.

	Per cent of wages				
	1 to 1½	1½ to 2	2 to 3	3 to 4½	4½ to 6
Communal insurance	48.9	24.5	26.6	-------	-------
Local sick funds	1.3	8.4	50.6	37.0	2.7
Establishment funds	6.8	11.7	49.1	29.5	2.9
Miners' funds	5.8	21.1	46.6	25.1	1.4
All funds	21.5	16.2	40.8	19.8	1.7

The right to increase the dues whenever this appears necessary, and in general to adjust the dues to the level of expenditures, in view of the compulsory character of the insurance, permits the whole system to run on an admittedly assessment basis. No requirement is placed upon the funds to accumulate actuarily correct reserves, and thus a great many complications of an actuarial character are avoided. The building up of a small reserve fund not to exceed the average budget of one year is required.

The administration of the sickness system is simple and democratic. Each fund has a general committee and administrative board. On the general committee one-third of the members is elected by the employers and two-thirds by the insured employees, and the members of the administrative committee are elected by the two groups of the general committee separately and in the same proportion. The funds prepare and adopt their own constitutions and by-laws subject to approval by the central authorities. The control of sickness insurance, as well as of other branches of social insurance, is vested in a comprehensive administrative machinery consisting of an imperial insurance office and state insurance offices for the various states, superior insurance offices, and finally local insurance offices, as branches separate for the minor administrative authority or groups of such units.

A few data concerning the business operations will indicate the extent to which the German sickness insurance system must influence the life of the wageworkers.

Receipts of all Funds (Except Miners' Funds).

Year	Dues from employers and employees	Entrance fees	Interest on investment	Loans paid in	All other receipts	Total
1885	$13,072,852	$287,297	$195,225	$40,831	$694,189	$14,290,337
1890	21,383,039	332,222	553,852	252,594	1,055,165	23,576,872
1895	27,571,087	315,566	750,453	301,262	1,546,432	30,484,800
1900	39,020,649	394,528	1,218,499	795,622	2,259,151	43,688,449
1905	58,961,265	447,137	1,545,476	1,113,328	3,136,606	65,203,812
1911	102,204,554	[1]	[2]	[2]	4,417,066	106,621,620
1912	110,331,040	[1]	[2]	[2]	5,246,044	115,577,084
1913	115,909,260	[1]	[2]	[2]	5,349,979	121,259,239

[1] Included with "dues."
[2] Included with all other.

Expenditures, Investments Excluded.

Year	Benefits	Administration	All other	Total	Per cent of administration expense	Per cent of administration to benefits paid
1885	$11,281,229	$805,520	$443,196	$12,529,945	6.6	7.1
1890	20,001,523	1,283,576	779,939	22,065,038	6.0	6.4
1895	24,947,723	1,769,980	1,100,717	27,818,420	6.6	7.1
1900	37,571,917	2,563,207	1,873,672	42,008,796	6.4	6.8
1905	55,274,045	3,723,835	2,982,880	61,980,760	6.3	6.7
1910	70,551,947	4,863,338	8,014,466	83,429,751	6.4	6.9
1911	74,496,997	5,281,065	13,642,827	93,420,889	6.6	7.1
1912	85,617,575	5,140,414	3,260,792	94,018,781	5.7	6.0
1913	98,983,899	6,157,354	3,859,823	108,000,076	6.2	6.6

Expenditures for Benefits.

Year	Medical	Medical and drug supplies	Money benefits	Maternity benefits	Funeral benefits	Hospital care[1]	Total
1885	$2,156,504	$1,683,139	$5,702,225	$156,855	$520,851	$1,061,655	$11,281,229
1890	3,994,462	3,376,563	9,492,319	241,358	780,642	2,116,179	20,001,523
1895	5,507,582	4,315,965	10,794,788	433,641	883,844	3,011,908	24,947,723
1900	8,176,865	6,186,960	16,649,419	607,967	1,262,026	4,694,680	37,577,917
1905	12,640,927	8,242,947	24,470,440	1,089,777	1,511,453	7,318,501	55,274,045
1910	18,192,838	11,475,470	32,356,773	1,530,871	1,776,023	10,832,982	76,164,957
1911	19,983,505	12,654,754	36,552,748	1,618,199	2,029,064	12,289,207	85,077,477
1912	20,380,724	13,020,038	35,794,829	1,715,038	1,888,035	12,818,912	85,617,576
1913	22,358,051	14,355,602	38,446,842	1,803,748	1,911,602	14,107,554	92,983,399

[1]Including small amounts for care of convalescents.

The financial data given illustrate the "current cost" system of sickness insurance in Germany. Contributions from employers and employees practically constitute the entire income. Income from the interest accounts hardly reaches 2 per cent of the total, and "all other receipts" are largely accounts of sums in transit.

The economy of administration is striking. Eliminating "all other" expenditures, which are also largely transit accounts, the expense of administration is only about 6.5 per cent; for every dollar spent in benefits the administration costs less than 7 cents.

The assets accumulated are comparatively small. On the whole, they have not reached the amount of the year's income prescribed by the law, constituting about two-thirds of such income.

Money benefits and medical aid constitute the two main services of the system. Adding medical aid, supplies and hospital treatment together, the cost is even higher than the money benefits, but equals the combined amount of the ordinary money benefit, the maternity benefit and funeral benefit. The cost of the latter two is not high.

It amounts to about 5 per cent of the total budget. Proportionately the cost of medical aid, supplies and hospital has increased faster than that of the money benefits, partially because of the increase in the price

paid for these services, but also because of the substantial extension of these services. On a per capita basis the cost of the system has grown as follows:

Cost of Relief Per Member.

Year	Dues, etc.	Money benefit	Medical aid	Supplies	Hospital	Other expense	Total	Administration	Average cost	
									Per case of sickness	Per day of sickness
1890	$3 30	$1 44	$0 61	$0 51	†	$0 48	$3 04	$0 20	$8 31	$0 50
1895	3 71	1 44	73	57	$0 40	18	3 32	21	9 23	54
1900	4 15	1 75	86	65	49	20	3 95	24	10 21	58
1905	5 33	2 19	1 13	74	65	23	4 94	30	12 42	63
1911	7 03	*	*	*	*	*	6 42	39	15 18	81
1912	7 79	*	*	*	*	*	7 01	44	16 47	84
1913	7 97	*	*	*	*	*	7 36	50	17 60	87

*Figures not available.
†Included in all other.

For a due appreciation of these figures it is necessary to remember that under the German system of compensation, all industrial injuries during the first 13 weeks are taken care of by the system of sickness insurance. The amount of medical aid and money benefits which the sickness funds are called upon to render naturally ranks with the industrial hazard of the trade, but on the whole, estimates seem to indicate that some eight per cent of the total cost of the sickness insurance system is chargeable to industrial accidents. Statistical information in regard to sickness experience collected under this comprehensive system is very voluminous. Elsewhere use is made of this information for the purpose of throwing some light upon conditions in this country. It may be advantageous in this place, however, to quote a few figures which indicate the extent of the work done in terms of sickness rather than in figures of financial cost.

Year	Cases of sickness		Days of sickness	
	Total	Per 100 members	Total	Per member
1885	1,804,829	42.0	25,301,178	5.9
1890	2,422,350	36.8	39,176,689	6.0
1895	2,703,632	36.9	46,470,023	6.2
1900	3,679,285	38.6	64,916,827	6.8
1905	4,451,448	39.8	88,082,296	7.9
1911	6,308,009	43.3	124,372,461	8.6
1912	6,525,858	46.1	128,381,213	9.1
1913	6,630,840	45.1	133,685,017	9.0

SECTION II.

AUSTRIA.

The adoption of compulsory sickness insurance in Austria by the law of March 30, 1888, was a direct result of the influence of Germany's earlier action of 1883. The conditions in Austria previous to the legislation were almost an exact counterpart of those in Germany described above. Already a variety of mutual or establishment funds for insurance against sickness existed. By an act of 1854 such funds were created for miners. An ordinance of 1859 created factory and guild sickness funds and even made employers contributions compulsory, though membership in these funds was not always compulsory for the employees. Voluntary benefit societies on local or other lines grew up. In 1879 there were some 860 organizations with a membership of over 300,000, and a budget of some 2,000,000 florins, or about $800,000. After several efforts to remedy the situation by partial measures, a bill for compulsory sickness insurance after the German pattern was introduced in 1885, and after three years of parliamentary discussion, became a law in 1888. This followed almost immediately after the adoption of the accident compensation law in 1887. The system remained without any great modifications.

Sickness insurance is compulsory for all manual laborers regardless of their earnings, and for office employees earning less than 2,400 crowns ($487) per annum in:

1. Factories, smelting plants, mines, shipyards, quarries, establishments using or manufacturing explosives, and all establishments using mechanical power.
2. Building trades and all operations in connection therewith.
3. All establishments subject to the industrial code and other business undertakings.
4. Railway and other land transportation, and inland navigation.

Sickness insurance does not cover outworkers, domestic service, agriculture, forestry, navigation, nor fishing on high seas.

As the evolution, so the organization of the sickness insurance system in Austria has followed closely that of Germany. In fact, in almost all respects the Austrian sickness insurance system is virtually identical with Germany.

The increase in the number of persons insured in Austria has been gradual because there has been practically no substantial extension of the act by subsequent amendments.

Total Number Insured.

	Male	Female	Total
1890	1,209,930	338,895	1,548,825
1895	1,607,943	458,492	2,066,435
1900	1,958,967	540,963	2,499,930
1905	2,203,322	640,923	2,844,245
1912	2,821,361	872,753	3,694,114

In general the tendency in Austria, as in Germany, has been for the increase in the membership of the local district funds at a faster rate than that of the other funds, but the tendency has not been as strongly marked, while as far as the number of funds is concerned, the miscellaneous funds have actually increased in proportion, only the establishment funds declining.

Number of Funds.

Funds	1890		1900		1912	
	Number	Per cent	Number	Per cent	Number	Per cent
District	545	20.5	568	19.5	582	17.2
Establishment	1,427	53.7	1,336	45.9	1,204	35.3
Building	3	.1	2	.1	52	1.5
Guild	632	23.8	866	29.7	1,307	38.3
Friendly societies	53	1.9	141	4.8	263	7.7
Totals	2,660	100.0	2,913	100.0	3,408	100.0

Number of Insured.

Funds	1890		1900		1912	
	Number	Per cent	Number	Per cent	Number	Per cent
District	550,606	35.6	1,038,785	41.5	1,592,768	43.1
Establishment	565,642	32.6	664,677	26.6	797,529	21.5
Building	663	-------	339	-------	6,542	.2
Guild	230,578	14.9	367,427	14.7	630,510	17.1
Friendly societies	261,336	16.9	428,702	17.2	666,765	18.1
Totals	1,548,825	100.0	2,499,930	100.0	3,694,114	100.0

The financial basis of the Austrian fund resembles that of the German fund, but the sickness insurance system is responsible for the care of industrial accidents only during the first four weeks of disability as against 13 weeks in Germany.

The normal maximum of premium payments is 3 per cent of wages, and an increase above that amount is surrounded by many restrictions. The funds are required to put into the reserve 20 per cent of their annual contributions, until a reserve equal to twice the amount of

average annual contributions is accumulated. An important financial provision is that requiring the formation of federations of district funds within the larger territorial areas. The main purposes of the federations are: to provide an additional reserve fund in the nature of a reinsurance fund; to make investments for funds; to employ supervising inspectors for funds; and to compile statistics.

The receipts and expenditures of all the sick benefit funds, converted into American denominations, are as follows:

Year	Receipts			Expenditures				
	Contributions	All other	Total	Insurance benefits	Administration	All other	Total	Surplus
1890	$4,664,940	$353,017	$5,017,957	$4,099,382	$364,588	$140,273	$4,604,243	$413,714
1895	6,677,482	445,382	7,122,864	5,784,485	516,838	267,960	6,569,283	553,581
1900	8,973,412	609,609	9,583,021	8,129,338	727,349	400,113	9,256,800	326,221
1905	11,447,576	799,008	12,246,584	10,368,022	976,836	491,666	11,836,524	410,060
1910	16,259,219	1,233,805	17,493,024	13,894,359	1,525,753	764,128	16,184,240	1,308,785
1913	17,496,796	1,342,361	18,839,157	15,787,706	1,655,951	771,802	18,215,459	623,697

The cost of administration appears somewhat higher than in Germany, running on the level of about 9 per cent to the actual expenditures for insurance benefits.

The average receipts and expenditures per member for the same year were as follows:

Year	Receipts per member				Expenditures per member			
	Contributions of member	Contributions of employer	All other	Total	For insurance benefits	Administration	All other	Total
1890	$2 10	$0 91	$0 23	$3 24	$2 65	$0 23	$0 09	$2 97
1895	2 26	97	22	3 45	2 80	25	13	3 18
1900	2 48	1 11	24	3 83	3 25	29	16	3 70
1905	2 76	1 27	28	4 31	3 65	34	17	4 16
1910	3 16	1 52	36	5 04	4 01	44	22	4 67
1913	3 46	1 71	40	5 57	4 67	49	23	5 39

The distribution of the expenditures for insurance benefits according to the main division of benefits was as follows:

Year	Sick benefits	Physicians' compensation	Medicine, Supplies, etc.	Hospital treatment	Funeral benefit	Total
1890	$2,494,464	$730,800	$558,047	$180,467	$135,604	$4,099,382
1895	3,450,594	1,044,638	748,258	357,077	183,918	5,784,485
1900	4,883,430	1,443,127	1,068,892	526,176	287,713	8,129,338
1905	6,097,714	1,852,781	1,370,250	765,310	281,967	10,368,022
1910	7,855,705	2,791,964	1,778,055	1,141,811	327,824	13,894,359
1913	8,679,047	3,278,223	2,000,652	1,450,631	379,153	15,797,796

The per capita cost of the benefits has somewhat increased, though the proportion between the various services has not changed materially, except that the amount spent on hospital services has shown a proportionately faster rate of increase.

Year	Sick benefits	Physicians' compensation	Medicines, supplies, etc.	Hospital treatment	Funeral benefits	Total
1890	$1 61	$0 47	$0 36	$0 12	$0 09	$2 65
1895	1 67	51	36	17	09	2 80
1900	1 98	58	44	21	09	3 22
1905	2 15	65	48	27	10	3 65
1910	2 27	81	51	33	09	4 01
1913	2 57	97	59	43	11	4 67

The large amount of work done as well as the rapid increase is sufficiently demonstrated by the following brief tables:

Year	*Cases of sickness	*Per 100 members	*Number of sick members	*Per 100 members	Number cases sick per 100	Child-birth	Per 100 female members	Number of deaths	Per 1,000 members
1890	770,903	49.8	626,809	40.5	123	26,780	7.90	15,925	10.3
1895	971,753	47.0	783,883	37.9	124	41,346	9.13	20,094	9.7
1900	1,262,095	50.5	1,002,466	40.1	126	51,053	9.44	23,845	9.5
1905	1,476,961	51.9	1,165,414	41.0	128	50,696	7.91	27,080	9.5
1910	1,721,316	49.6	†	†	†	56,198	7.03	27,731	8.0
1913	1,751,123	51.8	†	†	†	52,288	6.35	27,370	8.1

*Exclusive of confinement.
†Data not available.

It is significant that there has been practically no increase in the proportion of members calling for financial aid; though the number of cases has increased. This is entirely due to the rising proportion of cases to the number of sick members; even this proportion has not increased alarmingly. A more eloquent measure of the extent of the work done is furnished by the proportionate number of sick days paid for. It is also preferable to give these data separately by sex.

Year	Cases of sickness		Average duration of case in days		Average number of days of sickness per member			Deaths per 1,000 members	
						Female			
	Male	Female	Male	Female[1]	Male	Without confinement	With confinement	Male	Female
1890	49.9	49.5	14.7	17.1	7.32	8.44	10.48	10.0	11.2
1895	47.9	44.0	16.3	18.7	7.85	8.23	10.68	9.8	9.6
1900	52.3	44.1	16.3	19.3	8.06	8.50	11.10	9.2	8.8
1905	54.1	44.5	16.7	19.6	9.05	8.74	10.98	9.6	9.3

[1]Exclusive of confinement.

The average number of sick days has increased materially for the male membership, but not for women. It is usually recognized that men, especially of the working class, are less likely to take care of their health, and an explanation suggests itself that they were slower in acquiring the habit of demanding medical care for ailments not acute.

SECTION III.

HUNGARY.

The system of sickness insurance in Hungary, introduced by the act of 1891, was strongly influenced by the experience of both Germany and Austria, and presents comparatively few novel principles. In 1907 the sickness insurance law was codified, together with the new accident insurance or compensation law, into one enactment.

The original act included industrial establishments, mines, quarries and metallurgical establishments, larger construction undertakings and transportation (except high sea navigation) and commercial establishments. The list covered fairly completely manufacturers, mining, construction and commerce. The revision of the act in 1907 added no new important group, but specifically included governmental monopolies, state and municipal undertakings and a few others.

An important change of the newer act was that of bringing outworkers under the compulsory system. Deep sea navigation and domestic service, however, still remain outside the compulsory law.

Within the establishments covered by the law all persons are subject to the compulsory insurance unless their earnings exceed 2,400 kronen ($487) per annum, or eight kronen ($1.624) per diem.

Voluntary insurance is open to various groups exempted from the compulsory system. These include domestic servants, outworkers, artisans, ordinary day laborers (casual workers), members of the family of insured persons, students in educational laboratories, and agricultural laborers.

The most important change introduced by the act of 1907 was in the organization of insurance. In a sense this law presents the first experiment of a state sickness insurance fund on national lines. The law of 1907 consolidated all the local funds into two national insurance funds.

In scope of activity the Hungarian system follows closely the Austrian system requiring virtually the same minimum benefits. It is significant, however, that the grant of free medical and obstetrical aid to the members of the family is required. Hungary was the first to do this.

The rate of dues, determined in percentage of the assumed average wage, can not be less than two per cent or more than four per cent, and is shared equally by employer and employee instead of the German division of one-third and two-thirds. Of course the voluntary insured members pay the entire premium.

Statistics of the sickness insurance system in Hungary are shown in the following table:

Year	No. of funds	Membership		Total	Average per fund
		Male	Female		
1895	425	500,202	69,273	569,475	1,340
1900	458	555,512	79,838	635,350	1,387
1905	440	637,277	101,845	739,122	1,680

INCOME AND EXPENDITURES.

Income.

Year	Dues	Other	Total	Per capita
1895	$1,463,971	$261,824	$1,725,795	$3.03
1900	1,818,070	262,007	2,080,077	3.27
1905	2,383,341	362,386	2,745,727	3.71

Expenditures.

Year	Money benefit	Administration	Other	Total	Per capita
1895	$1,197,687	$212,736	$205,266	$1,615,689	$2.84
1900	1,596,280	257,110	145,301	1,998,691	3.15
1905	2,105,234	344,405	201,807	2,651,446	3.59

There has been some increase in the per capita cost of the system, but not an alarming one. The average expenditures have increased from $2.84 in 1895 to $3.59 in 1905. The cost of administration in Hungary is higher than in Germany, perhaps because the dimensions of the system are very much smaller. It represents usually about 12 or 12.5 per cent of the total income.

The essential data as to statistics of sickness may be added for purposes of comparison with those of other countries.

Year	Number of sick persons	Cases of sickness	Sick days paid for	Hospital	Total days	Sick per 100	Cases per 100	Sick days per member	Sick days per case
1895	112,022	141,042	1,249,875	288,790	1,538,665	19.67	24.77	2.7	13.7
1900	193,504	228,133	2,479,858	509,137	2,988,995	30.46	35.91	4.7	15.4
1905	233,170	295,940	3,389,383	590,497	4,081,892	31.55	40.04	5.3	17.1

Similar data for the cases of maternity are interesting:

Year	Number of parturients	Days compensated	Average number of days per case	Number of cases per 100 female members	Average number of days per female member
1895	2,033	37,049	18.22	2.93	.53
1900	6,132	150,539	24.55	7.68	1.89
1905	7,557	168,764	22.33	7.42	1.66

SECTION IV.

LUXEMBURG.

With a population of some 360,000 and a close economic dependence upon Germany by virtue of its membership in the German Customs Union, the little duchy of Luxemburg followed closely the German ideas of legislation, in this as in many other branches. It deserves separate mention because some of its problems, for the very reason of its small size, somewhat approach the problems of many smaller states of our Union.

The compulsory health insurance law of Luxemburg was enacted July, 1901. Fourteen years of parliamentary discussion preceded final legislative action. The earlier act of 1891 was not stringent, and applied to "approved" societies, that is, such organizations as were willing to subject themselves to the requirements of the law for the sake of the standing and the reputation of soundness which governmental control gave.

The compulsory sickness insurance law of 1901 covers all employees working for wages or salaries (in the labor cases when salary does not exceed 10 francs per diem or 3,000 francs per annum) in the following establishments:

(1) Steam railways, street railways, transportation by land, inland navigation.
(2) Mines, quarries, etc.
(3) Postal, telegraph and telephone service.
(4) Factories and metallurgical establishments.
(5) Building and construction.
(6) Commercial establishments.
(7) Establishments utilizing mechanical power.

Agriculture, domestic service and office work not connected with the other types of establishments enumerated are not covered. In 1906 the number of insured equaled 36,915 persons, or 14.62 per cent of the population.

The organization of insurance carriers is much smaller than in Germany. Only three types of such carriers are recognized by the law:

(1) Mutual aid societies.
(2) Establishment funds.
(3) District or local funds.

Of 66 insurance carriers, 15 were district funds, 48 establishment funds and only three mutual aid societies; but the few district funds

claimed a membership of some 13,895, the 48 factory funds some 21,677 members and the aid societies 125.

The benefits guaranteed by these institutions quite closely follow those of the German system before the revision of 1903. The minimum benefits are:

(1) Free medical aid and supplies.
(2) A sick benefit of 50 per cent of the wages for 13 weeks, beginning on the third day, though the waiting period is only two days.
(3) As a substitute for these two, hospital care and half the benefit.
(4) A maternity benefit of four weeks.
(5) A funeral benefit of 20 times the daily wages.

Various optional benefits are also permitted, as the increase of the duration of benefits to one year, of the amount up to three-fourths of the wages; the furnishing of other curative measures beside medical care, a small money benefit to hospital patients without dependents, an increase of the maternity benefit to six weeks; the supply of medical aids, drugs, etc., to the family of the member, the increase of the funeral benefit, the grant of the funeral benefit in case of death of the wife or child of the insured person, or the elimination of the waiting period. The application of these optional benefits is not extensive.

A detailed study of the experience of the results of this insurance has been published, of which the data for 1900 are:

Cases of sickness and accident per 100 members per annum:

	Male	Female	Total
With disability	89.3	46.7	86.7
Without disability	42.7	63.1	43.9
Totals	132.0	109.8	130.6
Number of sick days per member:			
With disability	10.7	6.1	10.4
Without disability	2.2	1.5	2.2
Totals	12.9	7.6	12.6

As in Germany, one-third is contributed by the employer and two-thirds by the employee.

SECTION V.

GREAT BRITAIN.

The proposals for compulsory social insurance were made to Great Britain many years ago, during the discussions preceding the introduction of the old age pension system, but at the time compulsory insurance was rejected as contrary to British traditions. The simultaneous introduction of compulsory health insurance and compulsory unemployment insurance in Great Britain in 1911, therefore, was regarded in Europe as an important victory of the compulsory principle of social insurance.

The statement has been frequently made that Great Britain adopted its compulsory insurance system from Germany. As there were practically no precedents for successful compulsory unemployment insurance Great Britain had to accomplish pioneer work organizing its unemployment insurance system. Even in the sphere of health insurance the British system resembles the German only in a few underlying principles. In the details of organization the British system differs so essentially from the German that it becomes necessary to distinguish between the two well-defined types—the British and the German.

Extent of the Compulsory System.

While the German system extended but gradually by inclusion of new additional groups through amendatory acts, the British act, from the first, announced the principle of almost universal extension.

Obligation to insure applies to all persons employed at manual labor under any form of contract provided they receive remuneration, and to persons between 16 and 70 years of age, and to other employed persons not engaged in manual labor but with an annual income of less than £160 (or $778.64). Of course, notwithstanding the breadth of the general principle, special exceptions have become necessary. Within the group of insured occupations certificates of exemption are given to persons not dependent upon their wages for a livelihood, to persons in receipt of a pension or other annual income (not earned) of £26 or over, and the like. These exceptions are unimportant, as less than 100,000 persons are so exempted. More important are the exemptions of certain classes of occupations on the ground that the terms of employment already provide benefits of equal value, this applying largely to certain government employees (approximately 300,000 persons). Other groups excluded are persons employed on agricultural holdings and receiving no money wages or pensions, casual employees working at other than the employer's business.

In addition the administrative authorities are given the power to

exclude other subsidiary employments, which do not constitute the usual means of livelihood. Some fifty minor occupations have been thus excluded.

In point of number, all these exceptions and exemptions are comparatively unimportant. The number of persons insured for the first year is shown in the following figures:

England	10,862,000
Scotland	1,455,000
Wales	688,000
Ireland	699,000
	13,704,000

These figures for the first year are largely in the nature of estimates. Unfortunately even for the following year, 1912–1913, the information is still more incomplete. Since the beginning of the war great changes must have taken place, but no statistics are available. Little care seems to have been taken to provide a statistical service in connection with this important social institution. In round figures some 14,000,000 persons came under the operation of the law in 1911, of whom men constituted some 10,000,000 and women 4,000,000.

Voluntary insurance is open to persons not covered by the compulsory system, whose earned income is less than £160 per annum. Persons who have been compulsory members for five years may continue as voluntary members under the act, irrespective of their incomes.

Of course voluntary insurance operating independent of government action is open to any one in England, under existing facilities, such as friendly societies, but voluntary insurance under the law offers the advantage of a state subsidy. Exact information as to the number of persons in the entire Kingdom who have taken advantage of the public voluntary system is not available. This voluntary insurance has not yet developed to any considerable extent.

Benefits Granted by the Act.

In the matter of benefits the English act shows substantial deviations from the continental systems. The essential services rendered by health insurance systems in general are a cash benefit for disability, medical aid, a maternity benefit, both in money and in obstetrical aid, and a funeral benefit. A funeral benefit is not included in the British system, due, it is asserted, to the influence of private industrial life insurance companies.[1] The other three forms of benefit are granted by the British system.

In practically all the continental health insurance systems the standards of benefits and services established by the law represent only the

[1] New Statesman Special Supplement, March 13, 1915, p. 30.

minimum requirements which the insurance carriers must meet. As a matter of fact, a considerable variety exists as to actual services rendered. The British act, on the contrary, establishes a uniform system of services, and though the act contains provisions for their possible extension through optional benefits, these provisions are of limited importance. The legal standards more nearly represent the maximum of service from which various deductions are made in actual practice.

Cash Sick Benefit.

The sickness benefit is payable for 26 weeks, beginning with the fourth day of disability.

The uniform sick benefit of ten shillings is for all male insured persons; seven and a half shillings for all insured female persons. Minors are entitled to smaller benefits, namely, six shillings (five shillings for females) for the first 13 weeks, and five shillings (four shillings for females) for the second 13 weeks. The amount is the same, irrespective of the earnings of the insured. This is a very essential deviation from the continental systems, which almost uniformly base the cash benefit upon the average earnings of the insured.

It is true that the act contains a clause permitting the reduction of the cash benefits when it would exceed two-thirds the usual earnings. But the clause is not mandatory and its application presents such complications that the clause has become a dead letter.

The principle of absolutely uniform benefits has the administrative advantage of simplicity, but it evidently is at fault from the social point of view because of its inelasticity. At one end it is inadequate and makes additional voluntary provision necessary, at the other it is excessive as it nearly equals the earnings, or perhaps even exceeds them, and thus offers a temptation for malingering.

As already stated, the duration of the cash sick benefit is 26 weeks, and the benefits begin on the fourth day of incapacity. If the disability extends beyond the 26 weeks the cash benefits are not altogether discontinued but reduced. This is called disablement benefit, and represents the invalidity insurance feature of the British national insurance act, which in Germany is attached to the old age system. The disablement benefit is payable until the age of 70, when the right to an old age pension accrues.

The medical benefit is very loosely described in the British act, and even the inclusion of ordinary surgical treatment does not follow from a careful interpretation of the language. In actual practice the medical attendance simply guarantees attendance by an "ordinary practitioner" and the services that he can be expected to render. It does not include obstetrical aid, operations, hospital care or nursing, so that in case of

need of medical or surgical aid beyond the resources of the general practitioner, or the need of hospital aid, the insured person is in the same position as before and is forced to pay personally for the needed care or to seek gratuitous treatment in charitable institutions.

Maternity Benefits.

The maternity benefit of the British act is very wide in its application, extending both to the insured women and wives of insured men. In line with the general tendency of the British act for specific amounts, the maternity benefit is a lump sum of 30 shillings. Since the medical benefit does not include obstetrical aid, the maternity benefit really represents a compensation for the expenses connected with childbirth.

If the mother comes under both descriptions, as an insured person and the wife of an insured person, she secures a double benefit, or 60 shillings (£3), and thus receives some compensation for time lost. The insured woman receives her maternity benefit under the condition of refraining from work for four weeks after childbirth. This makes the benefit equal to seven and one-half shillings per week, or the normal amount of sick benefit payable to insured women. There is a discrimination against unmarried mothers involved, because an unmarried insured woman on giving birth to a child receives only 30 shillings, most of which is required to meet the cost of medical aid, and she receives no compensation for time lost.

Sanatorium Benefit.

In addition to the standard benefits enumerated above (cash benefits, medical benefit and maternity benefit), the British law introduced a special "Sanatorium Benefit." This benefit offers treatment to persons suffering from tuberculosis or other diseases to be designated by the government authority. Since no such diseases have as yet been designated, the sanatorium benefit is limited to a tuberculosis benefit. It represents a very important step in the national struggle against tuberculosis in Great Britain. It is somewhat inaccurate to speak of this as a new or distinct benefit, since the treatment of tuberculosis is properly a part of the medical benefit. It is only because the extent of the medical benefit is so limited in England that the necessity for a special tuberculosis benefit remains. Notwithstanding the designation, "sanatorium benefit," sanatorium treatment is not guaranteed. The treatment may be given through clinics, or, even through the panel physicians, the patient remaining in his own home.

The above is a brief description of the benefits given. Because of the numerous exceptions and qualifications, which it is impossible to state except through a bulky interpretation of the entire act, a complete description is not included. In general, the money benefits are reduced

for persons who enter the insurance at an advanced age; they are reduced for aliens; they are reduced for members who are in arrears for more than three weeks in any one year, and for all members of any society, accounts of which show a deficit.

The Cost.

From the German and other continental systems the British act has adopted the principle of contributions by employers; from the Norwegian and Danish laws the principle of a subsidy from a state. Thus the insured employee, employer and the state all contribute to the cost.

Dues, like benefits, are uniform for practically all insured, with some minor exceptions. The standard cost of insurance is determined at ninepence per week for each male insured, and eightpence for each female insured, irrespective of age or occupation. These amounts are distributed as follows:

	Male	Female
Insured pays	4d	3d
Employer pays	3d	3d
State pays	2d	2d
Totals	9d	8d

An exception is made, however, in the case of low-paid wageworkers. It is recognized that even the partial burden of insurance may be too heavy for persons of small earning capacity, and that it is proper to relieve them of that burden to a greater extent than in the case of insured persons with a normal earning capacity. In this the British act has made a substantial contribution to the theory of social health insurance.

For all male persons earning not over two and one-half shillings per diem, and all female persons earning not over two shillings per diem, the following apportionment of the dues is provided for in the law:

	Employee	Employer	State
Males earning—			
Over 2s, but not over 2s 6d	3d	4d	2d
Over 1s 6d, but not over 2s	1d	5d	3d
Not over 1s 6d	0	6d	3d
Females earning—			
Over 1s 6d, but not over 2s	1d	4d	3d
Not over 1s 6d	0	5d	3d

Thus it appears that persons with an earning capacity of not over one and one-half shillings are entirely relieved of the payment of any dues, and in their case the entire cost is borne by the employer and the state. In voluntary insurance the dues paid by the insured are equal

to the combined dues of employer and the employee. The voluntary contributor receives the state subsidy to which the compulsorily insured person is entitled.

An exception of questionable value is made in the case of aliens. They were made subject to compulsory insurance mainly for the purpose of not creating an inducement in favor of employing aliens by relieving the employers from payment of their share. But the benefit of the state subsidy is denied to the aliens.

Organization of Insurance.

While benefit societies are admitted to participate in the administration of the insurance system in most European countries they were not encouraged. In England, on the contrary, these societies were practically made the main carriers of health insurance. Technically the British system imposes the compulsion to insure, but leaves the choice of carrier to the individual insured person, under certain conditions. Participation in the system is open to all societies approved for this purpose, and known as "approved societies," whether existing at the time of the act or later organized for the purpose. These include the ordinary friendly societies, trade union benefit funds, establishment aid societies and similar organizations. The main requirements are that they do not operate for profit and are managed by their membership. This latter requirement has been practically made a dead letter clause by the organization, on the part of the industrial life insurance companies, of "approved societies" with very little real democratic control.

In England, for which fairly accurate data were available, the distribution of the insured persons into various organizations was as follows:

	Male	Per cent	Female	Per cent	Total	Per cent
Friendly societies into branches	1,844,000	25.7	460,000	14.6	2,304,000	22.3
Friendly societies	1,809,000	25.2	505,000	16.0	2,314,000	22.4
Trade unions	950,000	13.2	240,000	7.6	1,190,000	11.5
Employers' funds	50,000	.7	12,000	.4	62,000	.6
Independent association companies	2,516,000	35.2	1,939,000	61.4	4,455,000	43.2
Totals	7,169,000	100.0	3,156,000	100.0	10,325,000	100.0

It thus appears that the industrial assurance companies organized some 43 per cent of the insured, and perhaps 80 per cent of those who previously carried no membership in fraternal societies. Of the insured women as many as 60 per cent belong to the societies organized by the industrial life insurance companies.

The system of optional choice of insurance carrier under a compulsory control was admittedly forced upon the British system by the popularity and strength of the existing friendly societies. The criticism

has, however, been made in England, that while it was perfectly proper to take measures to preserve the existing mutual aid societies, the insurance of those persons hitherto uninsured should have been provided for by creation of special institutions either local or national.

Various difficulties were created by the English system. One was the inability of some to gain admission into any society. Evidently the person of poor health is a less desirable risk than the healthy individual. The approved societies retained the right to reject undesirable risks. The approved societies are not permitted, however, to discriminate against an applicant on account of age alone. It was foreseen, therefore, that a residuum of insured persons who were not members of any approved society would remain. These persons have been provided for, as so-called "deposit contributors." This means practically that the persons instead of carrying an insurance, deposit their contributions through the post office into their own industrial accounts, out of which they may draw only up to the amount of their individual balances, for the benefit of sickness. This of course is not insurance at all but some sort of compulsory saving with subsidies from employer and state.

The number of such deposit contributions is not very large, however, and declining. Under the original act the arrangement for deposit contributions were to be temporary only, to be changed by the beginning of 1915. The war, however, made necessary an extension of this temporary arrangement.

In one respect the British form of organization seems to offer an advantage. It assumes a permanent relationship between the insured and the approved society, and offers a certain protection in periods of unemployment. If the insured person is in arrears for less than three weeks full benefits continue. When the insured person is in arrears for over three weeks per year of past insurance the benefits are gradually reduced until the arrears equal one-half the insured time, when benefits stop altogether. This extension of three weeks for each 52 of insurance is cumulative, whereas the German system provides for a maximum of three weeks extension in any one year.

Financial Organization.

The financial organization of the British system is extremely complex and especially so when compared with the simplicity of the continental health insurance systems. The latter are frankly based upon an assessment system. Within certain limits the insurance carriers in all the continental systems are permitted to collect as much money as is necessary to comply with the requirements of the law as to benefits, and even for the purpose of granting additional benefits.

The British system is the only one in which the premium as well as the benefits are defined in the law. If, notwithstanding careful actuarial work, the premium should prove inadequate, the remedy left is the

reduction of the benefits. Additional benefits over and above those required by law may only be granted if the legal premium provides a margin for the purpose.

The basis of the premiums or contributions is somewhat like that generally used in life insurance on the so-called level premium, or old plan. It is recognized that the rate of sickness increases with age, like the death rate. Instead of varying the rate of contributions with age, one level premium rate has been computed which is too high for the lower age groups, and too low for the higher age groups, and thus provides for the accumulation of reserves in the earlier years to be used up in the later years. The premiums in the British system are calculated with 16 as the assumed age of entry. Theoretically, therefore, for every insured person over 16 there should be some reserve. This, however, would have created a great many difficulties, which the act meets in a different way, keeping the rate of contributions uniform and establishing reduced rates of benefits for all persons entering insurance at age of 17 and upwards. Of course this reduction of benefits can only apply to the money benefit, since no gradation can be established in the medical benefit.

An application of this rule from the beginning of the act going into effect would have played havoc with the entire system, for naturally it found persons of all ages from 16 to 70, and the amount of insurance that could be given on this basis to persons of advanced age groups would have been very small indeed.

The act therefore extended the privilege of full benefits to persons of all ages entering insurance at the beginning and even for a considerable period (65 weeks) after the act went into operation (up to October 13, 1913).

With the existing freedom of choice of insurance carrier this would have created a serious discrimination against older persons. Approved societies would have all gone out to capture the younger men and would have rejected the older men. The actuarial method of meeting it is to credit the approved societies with the proper reserve which would have been accumulated up to the age of the insured person if he had begun his insurance at 16, which places insured persons of all ages on a par.

When such reserve values were calculated with reference to age and sex, they were found to aggregate the enormous amount of nearly £90,000,000, or some $437,000,000. Of course no such sums were available. It was decided, however, to deduct two-ninths of the contributions in case of men and two-eighths of the contributions in case of women for the purpose of gradually building up this enormous reserve, and it has been calculated that it would take 20 years to build it up completely.

Since the governmental subsidy is exactly equal to these proportions twopence out of ninepence is two-ninths for males, twopence out of eightpence is two-eighths for females, the net result is that the governmental subsidy for 20 years is given merely to build up reserves for persons who have entered at the age of 17 or over, while during these 20 years persons beginning at 16 do not receive any governmental subsidy. Meanwhile this reserve exists only on paper as a credit to the approved societies due from the insurance fund of the English government. If it had not been for the freedom of choice of the insurance carrier there would have been no necessity for this enormous reserve. The German system had been in existence for 30 years without any actuarial reserve, but the necessity to provide for equal standing for the societies, and for the opportunity to transfer from one society to another at will, had made this complex provision necessary.

Another reason for the reserve is the inclusion of the disablement or invalidity benefit, the cost of which rises with age even faster than that of sickness. It would be impossible to provide for invalidity insurance under a system of independent societies without making provision for reserves.

Financial Operation.

In view of the fragmentary character of the statistical information for the three minor divisions of the United Kingdom, it is sufficient to give the data for England.

The total receipts of the National Health Insurance Fund for England up to May 31, 1913, were:

From sale of stamps	£13,008,632
Exchequer grants	2,687,777
Miscellaneous	75,219
	£15,771,628
Expenditures—	
To societies for benefits and administration	£3,934,042
Insurance committees for medical aid and administration	1,371,175
Miscellaneous	36,522
	£5,341 739
Balance	10,429,889
	£15,771,628

The large accumulations are explained largely by the fact that while contributions were collected from July 25, 1912, the payment of benefits did not begin until January 15, 1913, so that a sufficient working reserve was built up. The combined balance sheet for the first 18

months of the operation, July 15, 1912, to January 11, 1914, of the National Health Insurance Fund for England appears as follows:

Receipts.

Sale of stamps	£18,012,840
Exchequer grants	4,533,777
Admiralty contributions on behalf of sailors and marines	100,000
All other	15,001
	£26,661,618

Disbursements.

Issued to—	
Approved societies for sickness and maternity benefits and administration	£8,774,908
Insurance committees for sanatorium and medical benefit	4,623,287
Deposit contributors	15,726
Navy and army fund	2,567
	£13,416,488
Miscellaneous disbursements	38,884
	£13,455,372
Issued to approved societies for investment	870,519
Investments purchased on behalf of approved societies	34,856
Balance on hand	12,300,871
Total	£26,661,618

The balance sheet above clearly illustrates the financial methods of the system. The contributions are gathered through sale of stamps through the post office, the proceeds of which go into the hands of the insurance commission. The employer is responsible for the combined dues of employer and employee, and he is empowered to hold, out of the wages paid, the employee's share. The stamps are pasted on the cards of the contributors, who deposit these every quarter with their societies, and the societies collect their pro-rata from the insurance commission. Payments are made to the societies both for the purpose of paying benefits, and to cover the cost of administration. The commission also supplies the money to the insurance committees to cover the cost of medical aid and administrative expenses. The balance available in the commission's hands is in reality credited to the approved societies, and the commission serves, as it were, as a cooperative accounting department for all societies.

Administration.

The existence of over 20,000 independent approved societies makes the problems of administration no less complex than those of finance. To begin with, it was found necessary to separate entirely the administration of money benefits (through the approved societies) from the administration of medical benefits, because the organization of medical aid is essentially a local problem and the approved societies do not

operate within specified geographical limits. The entire administration of the medical benefit is entrusted to insurance committees. Both organizations are subject to the control of four national health insurance commissions whose authority is somewhat coordinated by a joint committee for the United Kingdom.

The details of operation of the approved societies are entirely too complex to be gone into here at any length. Conditions of approval are established by the act and by rules and regulations of the commission. No one uniform basis of organization is prescribed, and as a matter of fact considerable variety exists in the conditions under which the sickness, maternity and disablement benefits are payable to insured persons in the same locality.

Insurance Committees.

The necessity of some local uniformity in the administration of the medical benefit has created the so-called insurance committee. These committees are organized in every county and county borough of the United Kingdom, 238 in all. They consist of representatives of the insured, of the physicians, and also of the local council and general administration, with a total membership of from 40 to 80 on each committee, all serving without remuneration. The absence of any representative of the employers is significant.

These committees control the medical service of the act, that is, arrangements with doctors, drug benefits, treatments of tuberculosis and sanatorium benefits, and in addition to this are entrusted with a few functions of minor importance.

In general then, it may be said that health insurance in Great Britain is provided through two distinct sets of organizations, the approved societies which pay cash benefits and the insurance committees which dispense medical aid. Each is largely independent of the other and each person must deal with both organizations.

The insurance commissions, one for each of the constituent parts of the United Kingdom, exercise a wide control over the insurance committees. For purposes of uniformity in their operations the joint committee exists, on which the English commission has a predominating influence.

Medical Organization.

While the administrative details are too complex to be gone into, the organization of medical aid is a matter of grave importance and must at least be briefly covered.

Due to the influence of the medical profession the act guaranteed the right of every duly licensed physician to practice under the law. A sum in the amount of eight shillings and sixpence for each insured person was also secured by the medical profession for the fund out of which

physicians practicing under the law were to be paid. Drugs administered under the law were to be paid for out of this same fund. An additional sixpence per insured person was allowed for treatment of tuberculosis. Another additional sixpence, known as the "floating sixpence," was permitted for the fund available for physicians if not needed for drugs.

While the actual arrangements for paying physicians were left to the insurance committee, all of them with the exception of those for Manchester and Salford have adopted one system of the panel with charges at so much per person. Under this system the insured person is limited to the services of the physician he has selected. The physician receives the seven shillings (or seven shillings sixpence) per each person who is on his panel. In the two cities a system of payment by visit still persists.

Cost of the System to the Government Treasury.

The cost of the whole system, though not definitely known, approaches some £20,000,000 to £25,000,000, or some $100,000,000 to $125,000,000 a year. The total estimated cost to the public treasury for 1914-1915 was £8,505,242 and for 1915-1916 £7,940,165. Of these appropriations the amount voted for central administration was about £1,000,000, the normal grants of the state subsidy amounted to over £5,500,000, and various special additional grants amounted to about £1,500,000. These additional grants were necessitated partly by the fact that the cost of medical aid, the amount of sickness among women and the loss from arrears had been underestimated and partly by the fact that benefits not contemplated in advance were provided.

Summary.

The complex British act may perhaps be better understood by a brief summary of the essential differences between it and the standard type of continental health insurance systems. These differing features are:

1. The combination of disablement (or invalidity) benefits with the sickness benefit.
2. The substantial grants from the public treasury.
3. The freedom of selection of carrier under a compulsory system.
4. The system of uniform dues irrespective of wages or locality.
5. Uniform benefits irrespective of wages or locality.
6. Separate administration of medical benefits.
7. Absence of hospital benefit except for tuberculosis.
8. Absence of funeral benefit.
9. Effort to build up a system of adequate reserve.
10. Absence of public funds even for contributors left outside of the voluntary insurance carriers.

Since the law went into effect, certain difficulties developed within the administration of the national health insurance system. The difficulty that caused most concern was the evidence of greater sickness in

some societies than had been estimated. The immediate assumption was that improper and too liberal administration of the benefits by the approved societies was the cause. A special "Sickness Benefit Claim Committee" was appointed by the chairman of the National Health Insurance Joint Committee on August 22, 1913. This committee concluded that the sickness rate among women was greater than estimated. Under an assessment system this would merely require a small increase of dues. Similarly, while the average estimates for men proved adequate for the total number of men insured in all the societies, the rate of sickness in the different societies varied greatly above and below this estimated average according as their membership was selected from unusually healthy or unhealthy groups.

An investigation on broader lines embracing all the social and economic effects of the act was undertaken by a special committee of the Fabian Society under the guidance of the well-known economist, Mr. Sidney Webb. This report was published in March, 1914. The criticisms made by the committee were mostly directed against the inadequacy of the measure provided by the law for the treatment and prevention of disease. It was the opinion of the committee that however faulty the scheme might appear to be, as a whole "the machine was working."

The main defects of the present health insurance system of Great Britain appear to be the exclusion of all hospital treatment in ordinary cases, the exclusion of operations, the lack of expert diagnoses and the opinion of a consultant, the inadequate provision of drugs and more expensive appliances, and the failure to increase hospital facilities which were at the date of the passage of the act most inadequate.

SECTION VI.

RUSSIA.

While compensation legislation was enacted in Russia as early as 1903, or some eight years before compensation legislation was introduced in any of the American commonwealths, the beginnings of the broad social insurance movement are directly traceable to the political upheaval of 1904 and 1905. An imperial ukase of December 12, 1904, announced the governmental program of social insurance legislation. As an immediate result of the radical political activity of October, 1905, this program was made very broad indeed, and generous insurance proposals both for sickness and old age were published by governmental authority. Delays ensued, and by 1908 only the bills for reorganization of compensation insurance, and for compulsory health insurance remained. The bills, after a prolonged course through the duma and imperial council, finally became laws in June, 1912.

The extent of application of the Russian insurance act is extremely limited, and perhaps less than in most other countries is the term "social insurance" applicable to it. It is more accurately described as "workmen's insurance," or even factory workers' insurance, since it covers only factories, mines, metallurgical establishments, inland navigations, street railways and steam railroads of local importance (but not the general railroad system), with the further limitation that they employ at least 20 hands, and utilize some form of mechanical power, or that they employ at least 30 hands when no mechanical power is used. The act is further limited by exclusion of casual work which does not last over one week. Within the establishments covered, salaried employees as well as wageworkers are brought under the system. Under these many limitations, out of some 13,000,000 wageworkers, artisans, office employees and others, not over 2,500,000 are insured against sickness.

When sickness insurance was introduced in Russia there was no considerable development of mutual sickness aid, such as existed prior to compulsory insurance in most countries of western Europe. There was less necessity, therefore, to take into account existing sick benefit institutions and a new uniform organization could be created. The limitation of insurance to employees of factories, or other large establishments, suggested to the Russian government the creation of establishment or factory funds as the exclusive type. In the case of establishments employing less than 200, cooperation of several establishments in one fund is obligatory. Such consolidation is permitted

to even larger establishments. The criticism is frequently made in Russia that this type of organization puts the administration of the funds too much under the influence of the employer, especially in case of a fund organized in connection with one establishment.

Whatever the force of the argument, the predominance of the employers' influence is guaranteed in the Russian system by the system of administration, which is claimed to be an adaptation of the German system and provides for a so-called general meeting of representative delegates and a board of directors elected by the former. In the general meeting, however, the employer or employers elect two-thirds and the insured workmen only one-third, so the employer is practically in control.

In the kind of benefits given the Russian system differs in one respect from the other European systems. The obligatory functions of the factory funds do not include *medical aid* because by virtue of legislation enacted in 1866 the employer of a factory or mine was required to furnish free medical aid to employees. A strong demand was made both by workmen and physicians to transfer this function from the employer to the factory fund, but it was rejected. It was quite customary among large employers of labor not only to employ factory physicians, but to support a dispensary, and even (in view of the common employment of married women in the textile industry) an obstetrical ward. The smaller employers made less comprehensive provision, but usually entered into agreement with city and county hospitals. The act of 1912 left this state of affairs practically undisturbed.

Outside of these peculiarities, the benefits are shaped after the European standards. The money sick benefit must equal, in case of married employees, at least one-half of the wages, but may be voluntarily increased by the fund up to two-thirds. In case of single persons the amount may vary between one-fourth and one-half. These benefits begin at the fourth day, unless the fund decides to reduce or abolish the waiting period, but in any case do not exceed 26 weeks.

The maternity benefit in normal cases is determined at six weeks, of which two weeks must fall before confinement. The minimum amount is one-half of the wages, which may be increased up to the full amount. The funeral benefit is put at from 20 to 30 times the daily wage.

In addition to the indicated optional extension of benefits the funds may also establish medical aid for sickness, childbirth, or death of the members of the family, provided the total cost of these optional benefits does not exceed one-third of the entire budget of the fund.

The cost of the sickness insurance is borne jointly by employers and employees, in the proportion of 40 per cent and 60 per cent. The deductions from the wages of the employees for this purpose must not

be less than 1 per cent and may not exceed 2 per cent in case of funds with a membership of 400 or over, or 3 per cent if the membership is below 400. In computing this deduction as well as the three money benefits, earnings of over 1,500 rubles ($772.50 at the standard rate of exchange of $0.515) are not taken into consideration, nor can the basis for computing the benefits exceed a daily wage of 5 rubles ($2.58).

For the governmental supervision of these funds and their activity, committees are organized in each province and one general council for the empire. No statistical data concerning the operation of this comparatively recent system are at present available.

SECTION VII.

ROUMANIA.

The tendency of countries which have been rather late in reaching a policy of social insurance is to introduce all branches at once, as against the slow and hesitating course of most legislation of 30 years ago. This is illustrated in the case of Roumania, which by the act of January 25, 1912, established a compulsory system of insurance against sickness, industrial accidents, old age and invalidity.

While largely influenced by German experience, the Roumanian system of social insurance is constructed on somewhat different lines, since most of the branches are practically administered in a direct form of state insurance through the Central Office for Handicrafts, minor credit institutions and workmen's insurance, though the sickness insurance is administered through the guild organizations. Provision is made for taking into the system benevolent societies of all kinds, whether organized in connection with factories or other establishments, districts or communities, provided their rules have been approved by the Central Office. Even if these rules have been approved, the decision to retain membership in them rests with the workingman himself. It is unlawful for the employer to coerce him into it.

The Roumanian system includes all workers in manufacturing industry, construction and mining. The benefits provided for under the head of sickness insurance are: 1, medical aid and drugs; 2, a sick benefit, and, 3, funeral expenses. The sick benefit is given after the first three days of illness and not beyond 16 weeks. A distinctive feature of the Roumanian act is the adjustment of the money benefit to the family conditions of the sick workman. The person with a dependent family receives 50 per cent of his wage, and the person without dependents only 35 per cent. In cases where hospital treatment is given the benefit is 25 per cent of the wages, and 10 per cent when there are no dependents. This right to money benefits begins only after six weeks of insurance. Wage groups have been established

in the law, the mean wage in each group being assumed as the representative wage upon which both contributions and benefits are based. The basis of division is shown in the following table:

Wage group	Wage units	Average wage	Funeral benefit	Weekly contributions
I.	1 lei	.50 lei	60	.05 lei
II.	Over 1 to 2 lei	1.50 lei	70	.20 lei
III.	Over 2 to 3 lei	2.50 lei	80	.30 lei
IV.	Over 3 to 4 lei	3.50 lei	90	.45 lei
V.	Over 4 lei	4.50 lei	100	.60 lei

NOTE.—One lei is equivalent to $0.195.

A maternity benefit is included which provides for the insured woman, in addition to medical attendance, six weeks sick benefit after confinement, provided the woman had been insured for at least 26 weeks. Furthermore this provision may be prolonged to three months if the woman nurses the child. The provision of maternity aid to wives of insured is optional with the guild and includes treatment by midwife and physician only.

The actual rates of contributions are specifically determined in the law. The proportion of the wages represented by the premium contributions is: For the first group 0.83 per cent, for the second group 2.22 per cent, for the third group 2 per cent, for the fourth group 2.14 per cent, and for the fifth group 2.22 per cent. What particular actuarial basis there is for these peculiar values it is impossible to ascertain. The desire to relieve the lowest paid groups of part of the cost is obvious for the cost of medical aid, which constitutes approximately one-half the cost of the sickness insurance, does not fluctuate in accordance with wages, but represents a flat per capita charge. Thus the upper wage groups are largely carrying the cost of insurance for the lower wage groups. The guilds are permitted to increase the benefits if after five years considerable surplus should have been accumulated.

Contrary to the uniform practice of all other European acts, the Roumanian law places the entire cost of insurance upon the wage-workers. As in other countries, the employer is required to purchase and place the stamps which serve as evidence of payments, but he is permitted to deduct their entire cost from the wages of his employees.

Data as to the results of the operation of this plan are unavailable, but the government published an estimate indicating that 140,657

persons would come under it, with the probable distribution into five wage groups.

Class	Persons injured	Weekly contributions	Total weekly income	Annual income[1]
1	10,542	.05 lei	527.10 lei	23,719.50 lei
2	32,001	.20 lei	6,400.20 lei	288,009.00 lei
3	29,351	.30 lei	8,805.30 lei	396,238.50 lei
4	38,418	.45 lei	17,288.10 lei	777,964.50 lei
5	30,345	.60 lei	18,207.00 lei	819,315.00 lei
Totals	140,657		51,227.70 lei	2,305,246.50 lei

[1]On an assumption of 270 working days or 45 working weeks per annum.

Assuming that the mean group wage fairly accurately represents the actual average wage, the average rate of contribution amounts to about 2.12 per cent.

The probable cost of the benefit was computed on a basis of six days of sickness per annum, a cost of medical aid, bearing the same proportion to the money benefits as in Germany, and similar assumptions. The total cost thus computed amounted to 2,241,038 lei, or within 2.12 per cent of the total income as above estimated.

SECTION VIII.

SERVIA.

Little can be learned from the experience of a small country with as slight development of industrial activity as Servia. Only for the purposes of obtaining a complete statement of European legislation on the subject is the Servian act included.

The social insurance law of Servia was passed as a part of the general industrial act in 1910. Only workmen employed by establishments subject to the industrial act (which includes industry, mining, transportation and trade) are covered by the compulsory sickness insurance. Voluntary members may be admitted to the insurance if the insurance associations so provide in their regulations. The administration of the insurance is entrusted to local workmen's insurance associations, which form together a national union of workmen's insurance associations, both of which are self-governing organizations, with employers and employees represented. These associations also administer insurance of compensation.

As in the case of most other countries, other funds, such as miners' funds or factory funds, may be admitted to operate under the law, provided an understanding is reached with the national union to that effect.

The benefits stipulated in the act include: (1) Medical attendance, medicines and similar supplies, and hospital or convalescent care for the employees and also for their families; (2) a daily sick benefit of not less than one-half of the daily wages when the workman is compelled on medical advice to remain in bed; (3) a funeral benefit.

The cost of this insurance is divided evenly between employer and employee, while the state, under the law, obligates itself to make an annual contribution of at least 100,000 dinars ($19,300) to the workmen's insurance associations.

SECTION IX.

NORWAY.

The little kingdom of Norway, with its population one-fifth smaller than that of the state of California, joined the list of countries with compulsory insurance systems in 1909, or 25 years later than Germany. The question of a governmental attitude towards facilities for health insurance open to wageworkers was under consideration from 1885, when the first commission for the study of social insurance was appointed, until 1909, when after the report of the third commission the law establishing compulsory health insurance was passed. The necessity of a definite social policy concerning sickness insurance was agreed upon from the first, but the comparative merits of compulsory insurance and subsidized voluntary sickness insurance, regulated by the government, were disputed. The compulsory principle won, in this, as in many other countries of Europe.

In the general outlines this Norwegian act is not unlike the older acts. Nevertheless there are some very substantial modifications.

The Norwegian act was the first to assert the principle that the compulsory system should include all industrial activity without restriction as to trade or occupation.

Again, a very distinct feature is the exemption of persons suffering from chronic disease. It may be surmised that the purposes of this exemption are to relieve the semi-invalid from discrimination in obtaining employment, and also to relieve the insurance organization from the burden of caring for the invalid. The wisdom of this exemption, which leaves comparatively few individuals badly in need of medical treatment out of the system, may be doubted.

In addition to the compulsory insurance, voluntary insurance is available to persons not in the compulsory group, between 15 and 40, if their income is not over 800 kronen, in the country, or 1,000 kronen in towns, nor the property of the insured together with that of the wife or husband exceed 7,000 kronen in the country, or 10,000 kronen in town.

The standard type of insurance carrier is the District Sickness Fund, one for each political district, or a combination of district funds are to be established by the communal authorities, and are subject to the central control of the state insurance institution, which has had for some time the monopoly of compensation insurance for the entire kingdom. These district funds on closer examination prove to be fairly autonomous and independent mutual funds, not essentially

different from the local funds of Germany or Austria, the distinctive feature being a direct representative of the communal government in the board.

Establishment funds and other mutual aid societies are admitted to operate under the law if they furnish equivalent benefits and have a membership of at least 200. The benefits are also of the standard kinds, with a few minor modifications.

Norway has followed the precedent of Hungary in making medical aid and even drugs and ordinary surgical supplies (but not such appliances as glasses, etc.) to the members of the immediate family, an organic part of the compulsory benefit scheme.

The Norwegian law provides a definite classification of wage groups in which all eligible persons must be insured. The following table illustrates the grouping:

Class	Annual wage	Daily wage	Average daily wage
1	0 to 300 kronen[1]	0.00 to 1.00 kronen	1.00 kronen
2	Over 300 to 600 kronen	Over 1.00 to 2.00 kronen	1.50 kronen
3	Over 600 to 900 kronen	Over 2.00 to 3.00 kronen	2.50 kronen
4	Over 900 to 1,400 kronen	Over 3.00 to 4.67 kronen	3.50 kronen

[1]One krone is equivalent to $0.268.

The designation of the last column is not quite accurate. What is presented is not a true average, but an assumed standard group wage, upon which both the benefits and dues are computed.

In its financial basis also the Norwegian act essentially differs from most systems of continental Europe. The Norwegian act was the first to introduce a definite money subsidy both from the state and communal treasury into a compulsory system. The cost of insurance as in most laws is measured in a percentage of wages. But the amount decided upon is distributed as follows: 60 per cent is paid by the insured, 10 per cent by the employer, 10 per cent by the commune, and 20 per cent by the state.

Statistics as to the application of the Norwegian compulsory sickness insurance system were not available.

SECTION X.

NETHERLANDS.

Netherlands is the latest country to establish a compulsory sickness insurance system for the wageworkers, by two acts of June 5, 1913. Very little information therefore can be given except a brief analysis of the law.

The situation before the establishment of the compulsory system did not differ very much from that found in other European countries during the similar stage. The concern of the government in the situation did not extend beyond some mild regulations and occasional commissions for the study of the subject and gathering of statistics. There were various types of sickness insurance funds from one national in its scope, with a membership of over 100,000, down to small local clubs. About one-half of these funds gave only money benefits, and one-sixth both forms of service together. The societies for medical benefits frequently were organizations for profit established by the local physician or druggist.

A movement for adequate provision for all workers began in Holland nearly fifteen years ago. As early as 1904 the government introduced the first bill for a compulsory system more or less on the lines of the German system, but for years there was comparatively little interest in the proposal. The rapid extension of the compulsory principle of sickness insurance in Europe since 1909 (five countries establishing such systems within the three years 1909-1912) finally proved a stimulus to action in Holland.

Some of the bills introduced and discussed during these years of preparation followed very closely on standard lines of European legislation. But the system actually adopted differs in several important features from these standards. The most important differences are:

1. The elimination of medical aid and funeral aid.
2. A method of organization perhaps more closely approaching state insurance than any other system.

Only experience will show how far the Dutch system was improved or handicapped by these differences. The reason for eliminating medical aid probably was the existence of the mutual aid societies already providing this form of insurance and the rather liberal grant for medical aid by municipalities to its indigent citizens. And yet it is doubtful whether the facilities already available are sufficient, and the absence of

medical aid from the sickness insurance system forced into the law some very rigid provisions.

Like most recent laws, the Dutch act does not undertake to enumerate the groups of wageworkers included. Rather is the act made applicable to all employees with comparatively few specified exceptions. These are mainly:

(*a*) Persons whose contract of service does not extend over four days (casual laborers).
(*b*) Those whose remuneration consists solely in instruction.
(*c*) Those whose daily wages exceed a certain amount, to be fixed in each district (the maximum must not be less than 2.50 florins nor more than 5 florins per day (or $1 to $2).
(*d*) Those who pay either a property tax or an income tax, or whose wives pay either tax.
(*e*) Members of crews of sea-going ships.
(*f*) Public employees.
(*g*) Persons in active military service, and a few groups of minor importance.

The option of voluntary insurance is open to most of these groups (except the groups excluded because of property or income restrictions) or to those who had been subject to compulsory insurance previously. Those so insured pay their own premiums.

The money benefit equals 70 per cent of the average daily wage. Thus the act of Netherlands would have established the highest scale of sickness benefits under compulsory laws if it had not been for the absence of any provision for medical aid. For those wageworkers, however, who receive gratuitous medical aid from the municipalities, and those who carry medical aid insurance in some voluntary fund, a scale of benefits is established which is higher than under any other European law. The benefit begins on the third day of disability and is limited to 26 weeks. Benefits equal to full wages in case of miscarriage are granted. This forms a rather striking contrast to the intense discussions in Great Britain whether pregnancy should be considered a sickness at all.

From these general standards local variations in benefits are, however, permitted, thus leaving the value of the high legal level of benefits somewhat doubtful. The sick benefits may be raised from 50 per cent to 90 per cent of the wages, the waiting period may be reduced, abolished altogether, or prolonged to five days, and the duration of benefits may be extended up to one year. All these modifications, even if applicable to separate districts only, in harmony with the general system of state insurance, must be ordered by the government.

While average wages were referred to above, the Dutch act, like most other European acts, aims to avoid the complications arising out of the effort to determine the average wages of each individual insured by

establishing a system of wage groups with an assured average wage for each group.

The cost of the insurance is divided equally between the employer and insured, the employer paying the entire amount, but is permitted to deduct the employee's share from his wages. In this the general practice of European systems is followed, but a distinct departure is the provision by which in the beginning at least the contributions for each wage group must be uniform, irrespective of hazards, and only after statistical evidence has been accumulated of differences of sickness rates in various trades, may differences in rate of contribution be established. The general rate may be increased for such reason by not more than one-half, either for trades or for separate establishments. It is noteworthy that in the latter case the employer is required to pay the additional contribution. Such variations in either direction must be ordered by the government even though they are to apply to individual funds only. The actual rates of contribution are to be established by the government for each district, and the law required that they be revised at least once every five years. The government again may enforce the increase of contributions or the reduction of benefits (presumably within the limits established by the law) if the income within any district is insufficient. Perhaps the most important feature is that by a formal declaration the state is liable for the payment of the sickness benefits.

In the district form of organization of the Dutch, special institutions are established within administrative districts, determined by governmental order, which have a population of not under 25,000. These institutions are known as labor councils, though their activity is limited to sickness insurance only. It is intended that through them other branches of social insurance shall be administered when established, and their authority in the law is defined as extended over workmen's insurance in general. These labor councils consist of an equal number of representatives of employers and employees, and a president appointed by the government. The employers elect their representatives by a graduated vote according to the number of persons employed (1 vote for 20 employees or less, 1 for the 21 to 100 workers, and 1 additional vote for each 100 persons employed). The insured employees over 25 years old vote. For larger areas consisting of a certain number of labor councils, insurance councils are established, with five paid members appointed by the government, and an equal number of representatives of employers and employees elected by the labor councils. The supervision of the central government over the local councils and their funds is very complete. In addition to these funds, practically

constituting a system of state insurance, special funds may be recognized subject to a requirement of democratic administration and freedom from profits, and under strict control of the labor councils.

Medical aid insurance on a voluntary basis may be fostered by the labor councils through organization of better "sick funds" as a part of the activity with respect to the prevention of sickness, which by the act is made a part of the activity of the labor councils and insurance councils.

PART II—VOLUNTARY SUBSIDIZED SYSTEMS.

SECTION I.

DENMARK.

The system of sickness insurance in Denmark is perhaps the most important and extensive of the subsidized voluntary sickness insurance systems in Europe. Differing from the German and most European systems, it depends upon the indirect method of substantial subsidies from the state treasury to achieve the same results which elsewhere have been achieved through the direct method of compulsion.

The system of governmental subsidies originated with the act of April 12, 1892, but the subject of sickness insurance had been discussed for 30 years. Mutual insurance against sickness originated with guilds. Their activity was not uniformly successful. Repeatedly in 1861, 1866, 1876 and in 1885 governmental commissions were instituted to study the situation and suggest legislation for the control and strengthening of the sick benefit societies. The last investigation showed the existence of some 1,000 societies with a combined membership not exceeding eight per cent of the population. Less than one-third of the societies furnished both money benefits and medical aid, the rest furnishing either one or the other. The amount of the benefit was usually very meager, falling in the rural districts as low as one-quarter krone (less than 7 cents) a day. As a result of this investigation a bill was introduced for compulsory sickness insurance in accordance with German standards.

After a prolonged discussion, the compulsory principle was rejected and the principle of state subsidies, combined with regulation, was substituted in the act of 1892. This legislation remained practically unchanged for nearly 25 years and Denmark therefore offers, perhaps, the best material for the appraisal of the efficiency of this method.

The law offers certain advantages to those benefit societies which are willing to register under the law as "recognized societies" and subject themselves to the government control. Registration began January 1, 1893, and while a large number registered at once, a great many others, and some of the strongest, did not register for many years. The total number registered in 1893 was 457; by the end of 1895, 629; by 1900, 1,020; by 1905, 1,391, and in 1914, according to the latest statistics available, 1,547.

Recognition under the law is given only to societies whose membership

consists of workmen, artisans, employees receiving small salaries and other persons in similar economic condition. Only for the first six months after the law went into effect were societies admitted whose membership consisted partly of persons of higher economic groups, with the proviso that no subsidies were to be paid on account of such persons.

Under the influence of the law of 1892 the membership of sickness benefit societies increased materially as the following figures show:

Year	Number of societies	Members
1893	457	116,763
1895	628	154,882
1900	1,104	302,198
1905	1,379	474,029
1910	1,507	666,679
1914	1,547	843,244

With a population of 2,757,000 the insured at present constitute 30 per cent. It is noteworthy that women constitute, as they have for many years, the majority of the insured, some 442,000 against 401,000 male members. It is quite customary for both husband and wife to carry separate insurance in the fund.

In order to entitle a society to recognition and subsidy under the act, certain minimum benefits must be given, though further extensions are permitted within the limits prescribed by the law. In this respect the methods of the compulsory acts are generally followed. These required benefits are:

1. Free medical aid and hospital care for members as well as their children under 15 living with parent.
2. A "sick benefit" which may be determined in proportion to the sick person's average wage, or on an assumed average wage for the entire membership, but in any case must not exceed two-thirds of the earnings of the sick person nor fall below 40 ore (9½ cents) per day. No benefit is paid for illness lasting less than three days. No benefits are required for normal confinement or pregnancy, though they may be included by the society voluntarily. The payment of funeral benefits is not allowed. The furnishing of drugs and supplies is not obligatory. The waiting period may be increased from three to seven days, the benefits to female members or minors may be decreased, diseases resulting from drunkenness, brawls, syphilis and the like may be excluded, but optional benefits seldom rise above the minimum requirements.

Over 70 per cent of all societies do not grant more than 16 cents per day to their male members, and 87.6 per cent of the societies do not exceed this for women.

Nearly 60 per cent of them have preserved the minimum time limit

of 13 weeks, about 23 per cent have gone over 13 weeks, but not as far as 26 weeks, and only 17 per cent have established a benefit period of 26 weeks. Only three funds have gone beyond this.

The cost of drugs and surgical supplies is not obligatory upon the benefit societies. As many as 57 per cent of all societies do not furnish any drugs at all, and only 18 per cent pay for the entire cost of ordinary medicine.

The extent of the operations of the Danish system is shown by the following figures:

Year	Money benefits	Physician	Drugs	Hospital	Administration	Total
1893	$117,736	$71,365	$32,739	$13,676	$22,563	$258,079
1895	157,047	118,831	44,278	21,198	26,339	367,693
1900	314,946	265,361	94,894	49,732	58,799	783,732
1905	480,240	469,811	155,115	122,779	93,601	1,321,546
1910	621,763	736,737	212,452	209,279	157,882	1,938,113
1914	782,818	999,732	275,432	333,903	212,515	2,604,400

The cost of the entire system has increased nearly sixfold, but the membership of the recognized societies has increased almost fivefold and the average cost has not increased materially, the largest increase being in the cost of hospital and medical service, indicating a substantial extension of these benefits.

Per Capita Cost.

Year	Money benefits	Hospital	Medicine	Physician	Administration	Total	Per cent administration cost
1893	$1 01	$0 12	$0 28	$0 62	$0 19	$2 22	8.6
1895	1 01	14	28	77	17	2 37	7.3
1900	1 04	18	31	88	19	2 60	7.3
1905	1 02	27	34	99	20	2 82	7.1
1910	93	31	32	1 11	24	2 91	8.2
1914	93	39	33	1 18	25	3 08	8.1

Next to the absence of compulsory principle the most distinctive feature of the Danish system is the very substantial demand it makes upon the state treasury. The original grant, as stipulated in the act of 1892, was to equal 500,000 kroner, and much larger amounts have been given since then. This subsidy is apportioned among the sick benefit societies in two different ways; one-half is distributed according to the membership and one-half according to the amount of dues contributed by members; in this way the levying of higher dues is encouraged. The limitations placed by the law on the first form of subsidy shall not exceed 2 kroner per member, and the second, one-fifth of the members' contributions. Together these two methods of state subsidy constitute a substantial part of the budget of the sick insurance societies.

Income of Sick Benefit Societies.

Year	Membership dues	State grant	Communal grant	All others	Total
1895	$969,083	$410,641	$34,707	$114,078	$1,528,509
1900	1,967,957	833,745	64,290	240,747	3,096,739
1905	876,899	392,064	23,121	64,498	1,346,582
1910	1,226,910	534,407	36,856	96,066	1,894,239
1914	1,745,020	741,017	64,952	139,631	2,690,620

In addition to the state grant, several communal governments vote small subsidies to the sick insurance societies within their districts. The state subsidy is evidently substantial. In 1895 it represented 42.3 per cent of the membership dues and 27.8 per cent of the total income; in 1914, 43.1 per cent and 28 per cent. Taking the state grant and the communal subsidies together, the assistance granted to the sick benefit societies represents about 50 per cent of the membership contribution, or about equals the share of the burden placed by several compulsory acts upon the employers.

In addition to these direct financial subsidies there are also very important indirect ones. The law makes it mandatory for the communes to admit members of the recognized sick benefit societies to hospitals at half the regular rates, and in rural districts to provide free transportation for the physician or midwife to the home of the sick member who does not possess a horse and carriage.

This contribution from the public purse largely explained the rapid increase of the membership. The experience of Denmark with subsidized sickness insurance, especially as compared with that of other countries with voluntary subsidized systems, seems to indicate that to produce the desirable results the subsidy offered must be very substantial.

In matter of administration considerable freedom is allowed to the fund in adopting by-laws and regulating the composition of elective bodies and officers. A government office exercises central supervision.

SECTION II.

SWITZERLAND.

In the field of social insurance Switzerland has the unique distinction of being the only country in which a system of social insurance was rejected by a popular referendum after having passed the legislative chamber successfully. Though this occurred in 1900, it served for many years as an argument against social insurance legislation.

The referendum applied to the act of October 2, 1899, by which systems of compulsory sickness insurance and also accident insurance (compensation) were to be inaugurated. Though dissatisfaction was directed mainly against certain features of the compulsory sickness insurance the compensation provisions went down with it, and for over a decade after that Switzerland remained the only important country in Europe without a compensation act. The situation was finally remedied by the act of June 13, 1911, which established a compulsory accident insurance system and also a heavily subsidized voluntary sickness insurance system.

Efforts to introduce comprehensive movements in insurance in Switzerland date back for over 30 years. As early as 1881, when German insurance legislation was only in the making, and a new employers' liability act was under discussion in the federal legislation, the commission in charge of the act drew attention to the German plans and stated its conviction that though similar proposals were premature in Switzerland, it was inevitable for Switzerland to follow, as soon as the success of the proposed German systems was established.

In 1885 the council passed a resolution to inquire into the entire subject of workingmen's insurance. After several careful studies were made by various groups, a constitutional amendment authorizing the federal government to enact compulsory insurance acts passed the council early in 1890, and was approved at a referendum on October 26, 1890, by 283,228 votes against 92,000.

Nearly a decade passed before the plans shaped themselves into a bill known as "Lex Forrer" (Forrer's Act), which passed the national council October 2, 1899. The act established systems of compulsory insurance both against sickness and accident. The sickness insurance scheme which called forth most opposition was very comprehensive. It included all persons over 14 years working for wages, unless their employment was restricted to less than one week. Even day laborers and home workers could be subjected to compulsory insurance by legislation of the canton. The upper wage limit beyond which compulsion

did not apply was placed very high, at 5,000 francs. Insurance was to be effected through district sickness insurance funds, though other funds and mutual societies could come in and become an integral part of the system.

The benefits were to consist of medical aid, a sick benefit of 60 per cent of wages, and a small funeral benefit. The contributions were to be divided equally between employer and employees, while the state treasury was to add at least 1 centime (0.19 cent) for each day of membership.

The restriction of the system to wageworkers was decreed as class legislation, and the creation of public district funds was objected to as a factor detrimental to the voluntary funds and societies, which had been growing in favor with the people. A petition signed by 117,461 citizens demanded a referendum, and the act was rejected by 341,914 votes against 148,035.

But the movement for social insurance in Switzerland was not destroyed by this change in popular opinion. After a few years of investigation a bill was again introduced in 1906. This bill accepted the popular verdict in regard to compulsory sickness insurance, and proposed an insurance system that was compulsory for industrial accidents, but voluntary for sickness.

Notwithstanding this concession when the act finally passed the council on June 13, 1911, by a substantial majority of 136 to 12, demand for a referendum was again made by 76,000 citizens. It was held on February 4, 1912, but this time the act was sustained by 287,565 votes against 241,416.

The entire controversy thus appears as a victory of the voluntary principle against the compulsory one. Nevertheless the view is subject to some qualifications. For the act frankly aims to prepare the way for compulsory legislation in the near future. Not only cantons, but even separate communes, under the law are authorized to introduce compulsory sickness insurance, either generally or for certain groups of the population; and furthermore, in every such case the cantons or communes so doing were to be granted special subsidies by the Swiss Confederation, up to one-third of the premium.

The voluntary system as established by the act of 1911 is shaped on the same lines as the other subsidized voluntary systems, notably that of Denmark, in that it offers assistance to "recognized" funds, recognition being open to existing mutual aid organizations dependent upon certain conditions. These funds must operate on the principle of mutuality and not for profit; they must have their headquarters in Switzerland, and not treat Swiss citizens less favorably than other members. (It is significant that the subsidy is not denied to members of other nationalities residing in the country.) Membership must not

depend upon affiliation with any religious faith or a political party, and women must be admitted on equal terms with men, except in the case of trade union or establishment funds where only men are employed.

The recognized funds must raise their standard of service to come up to the minimum requirements of the law. These include either medical aid and drugs from the first day of sickness, or a money benefit of at least 1 franc per day from the third day. In either case benefits must be offered for at least 26 weeks.

About one-half of the voluntary funds granted only money benefits, and a few (about 4 per cent) were organized for the purpose of medical aid only, and there was an evident desire to adjust the law not to exclude any of the types of voluntary funds. The wisdom of this decision as against the Danish system of requiring both medical aid and sick benefits from recognized funds is subject to serious doubts.

Maternity care is covered by the provision requiring the recognized funds to treat childbirth as sickness, both in the administration of medical aid and the money benefit. The minimum sick benefit in maternity cases is six weeks, and an additional four weeks must be granted if the mother nurses the child. Funds, recognized after compliance with the requirements, receive the following subsidies:

1. For every insured child up to 14, an annual subsidy of 3.50 francs (66.5 cents).
2. If the fund grants either medical aid or sickness benefit, 3.50 francs (66.5 cents) for each adult male person, and 4 francs (77.2 cents) for each female person insured.
3. If the fund grants both medical aid and sickness benefit, 5 francs per member of either sex.
4. If the fund increases the duration of the benefit from 180 days to 360 days, and additional 0.50 franc (9.6 cents).
5. For every confinement a payment of 20 francs ($3.86) to the fund.
6. For every nursing benefit paid, a payment to the fund of 20 francs ($3.86).
7. In thinly-populated, mountainous districts where transportation is difficult, a special mountain subsidy up to 7 francs.

The Swiss sickness insurance act went into effect on January 1, 1914, and since no statistics are as yet available, it is impossible to estimate the influence of these subsidies in stimulating voluntary sickness insurance in Switzerland. These subsidies, however, appear substantial and should have an effect not unlike that in Denmark. The material with which this voluntary subsidized system is to operate is substantial. According to an investigation of mutual benefit societies made over 10 years ago, of 2,006 organizations reporting for 1903, 1,812 were giving sick benefits; of these 815, or 75 per cent, were giving

money benefits only; 74, or 4.1 per cent, medical aid only; and 923, or one-half (50.9 per cent), both medical aid and money benefits. The total membership amounted to 422,209 in a population of less than 3,500,000, or some 14 per cent.

SECTION III.

SWEDEN.

Though Sweden has not as yet adopted the compulsory principle in the field of sickness insurance, the law of 1913 establishing universal compulsory old age insurance, shaped very much on the German pattern, indicates that the compulsory principle as such has been recognized in the field of social insurance. Voluntary sickness insurance through such organizations as guilds, factory funds, or ordinary mutual aid societies has developed in Sweden since the middle of the nineteenth century. As early as 1884, very soon after the German system was established, a workmen's insurance committee was organized by the government to investigate.

The committee did not recommend compulsory insurance, but instead urged regulation and subsidies. These ideas found final expression in the act of October 30, 1891, concerning registered societies. Under this act societies for sickness relief may obtain official registration if they comply with the requirements of having at least 25 members, not being conducted for profit, and subjecting themselves to audit, were given a subsidy.

The effect of this subsidy was not at all startling, and in 1898 the government increased the rate of subsidy materially. According to the act of May 27, 1898, and subsequent amendments the contributions per member are now as follows:

Up to 100 members	1.50 kronen (40.2 cents)
Over 100 members to 300 members	1.00 kronen (26.8 cents)
Over 300 members to 2,600 members	.50 kronen (13.4 cents)
Over 2,600 members	.25 kronen (6.7 cents)

The somewhat more substantial subsidies of 1898 prove a better stimulus to registration of the societies and organization of new ones, as the following data indicate:

Year	Registered funds	Membership
1892	221	24,735
1895	572	77,573
1897	880	149,195
1898	1,075	184,119
1900	1,443	260,163
1905	2,122	437,288
1907	2,318	543,919

The membership is concentrated in cities. In 1907 it constituted some 21 per cent of the population and in rural districts only 5 per cent, the percentage for the entire country being only 10. This, however, was slightly increased by duplications, and eliminating these the net percentage is only 8.5.

The nature of the services rendered is far from satisfactory. A general classification of the disbursements is as follows:

Year	Sick benefit and medical aid	Funeral aid	Administration	Other	Total	Per cent of administration expense
1896	158,771kr.	21,874kr.	16,989kr.	14,474kr.	212,108kr.	8.0
1900	454,264kr.	83,692kr.	57,136kr.	42,092kr.	637,184kr.	9.0
1905	760,975kr.	170,355kr.	127,560kr.	63,242kr.	1,203,731kr.	10.6
1907	1,068,411kr.	211,187kr.	162,430kr.	71,968kr.	1,573,996kr.	10.7

The very substantial proportion of funeral benefits to the total expense is largely explained by the low level of sick benefits. Only a small proportion of the funds grant medical aid—less than 4 per cent of the total expenditures going for payment of physicians and druggists.

The amount of sick benefits is small. Out of 1,885 funds, over 800 gave benefits of less than 7 kronen per week (or 1 kronen [26.8 cents] per day); 575 of these 1,885 funds granted benefits for 10 weeks or less; 734 funds from 11 to 13 weeks, and 462 funds from 13 to 26 weeks; only 28 funds exceeded 26 weeks.

The much more limited success of the subsidized voluntary system in Sweden as compared with Denmark is at least partly to be explained by the much lower subsidy, which amounted from 5 per cent to 7 per cent, as against 30 per cent or more in Denmark.

SECTION IV.

FRANCE.

The sickness insurance system of France is just on the border-line between social and ordinary mutual insurance. Mutual benefit societies had appeared after the revolution at the end of the eighteenth century, and were first formally recognized by the act of 1852. Since then they have grown rather rapidly, so that there were over 4,500,000 members in 1910. They are regulated at present largely by the act of April 1, 1898, and by numerous subsequent amendments.

The claim of these societies for a place among social insurance institutions rests upon the fact that a state subsidy is given. There is no compulsion, nor any obligation upon employers to contribute, though many employers voluntarily do so.

The state gives small subsidies to mutual benefit societies but only one-half of the activity of these mutual aid societies is in the field of sickness insurance. Out of an expenditure of over $9,170,000 in 1905, only $4,557,000 went for sickness benefits. The other lines of activity are funeral expenses, aid to widows, orphans, invalids, old persons, and formal pensioners.

Out of 18,176 societies in 1905, 9,532 societies provided medical aid, 8,637 societies furnished drugs also, and 8,738 gave sick benefits as well. It is impossible to tell exactly how many members of the mutual aid societies are insured against sickness, but the number is, approximately, 5 per cent of the population of France. Furthermore, of those getting sickness benefits in some form or other, about 30 per cent receive merely medical aid.

The formal claim of the French system for a place in the list of social health insurance systems is established, but side by side with the Danish and Swiss voluntary subsidized systems, little of value can be learned from French experience except that the effect of a slight subsidy is largely dissipated.

CHAPTER VI.

SOCIAL RESULTS OF SOCIAL INSURANCE.

SOCIAL RESULTS OF SOCIAL INSURANCE.

What has been the effect of this extensive and constantly growing policy of social insurance upon the well-being of the working masses as well as upon the whole population of the various European countries?

A policy of social welfare is to be judged by its actual effects. Unfortunately the present political situation in Europe made it impossible for the commission to investigate these results by personal study and observation. In general it may be said that the vast preponderance of evidence is in favor of the social insurance institutions and the results of their activity. The rapid spread of the social insurance method in dealing with the problems of destitution and pauperism is an indication of its success.

The literature emanating from foreign observers (as for instance American observers of German conditions, since most American writers have largely limited their study of social insurance to Germany, as the best exponent of both the theory and practice) is most enthusiastic, while in the indigenous literature of the countries affected some critical notes may be observed.

This difference is but natural. The general principles of social insurance are no longer discussed, and the attention of students is directed mainly to the details of application and administration.

It would be a very large undertaking to compile combined statistics of the application of social insurance throughout Europe, but as a rough approximation there are at least 50,000,000 workmen enjoying some social insurance protection in Europe, who with their dependents constitute probably a population of one hundred millions to one hundred fifty millions or about one-half of Europe's population. As far as accident compensation is concerned, the number is probably still larger. The annual flow of relief or compensation (whichever term be preferred) in form of money and medical and other services probably amounts to many hundreds of millions of dollars; only a portion (a good deal less than one-half) of this cost is obtained by compulsory contributions from the employees themselves. A volume of medical services, so large as to be difficult to measure, is rendered, a goodly proportion of which would not have been rendered without insurance.

It is sufficient to quote here the rather important illustration of the work performed under the social insurance method. In the field of health insurance, the Leipzig institution is justly famous for its size as well as efficiency. Leipzig supplies a valuable picture of what can be accomplished under compulsory health insurance. The city of

Leipzig, before the war, had a population of 600,000 to 700,000. The organization of the health insurance in this city differs from that of many other cities in that it possesses one general local sick insurance fund. This general fund for the cities of Leipzig and 42 surrounding suburbs was formed in 1887 by consolidation of various trade funds existing by virtue of the German sickness insurance law (see page 152 of this report). At the time of this consolidation the funds had a membership of 20,833 members. In 1913, the last year for which the statistical report is available, the consolidated fund had a membership of 207,987 persons, practically the entire working population of the city. Of the 207,987 members, this being the average for the year, 189,921 were insured in virtue of the compulsory law, and 18,066 were voluntary members.

The fund grants the following benefits, many of which are over and above the minimum requirements of the law:

(1) Medical treatment, from the beginning of sickness, drugs, eyeglasses, trusses and other appliances up to the value of 75 marks.
(2) In case of disability due to sickness, a compensation equal to 55 per cent of the wages beginning with the second day of sickness and up to 34 weeks.
(3) Instead of the above two benefits, free treatment and care in hospital or home for convalescents.
(4) In such cases, two-thirds of the full sick benefit to the dependents of a married member, or one-fourth of the full sick benefit to the unmarried member.
(5) A pregnancy benefit equal to the sick benefit during the last two weeks before childbirth.
(6) A maternity benefit equal to the sick benefit to the working mother for six weeks.
(7) A funeral benefit of 100 marks in case of death of member.
(8) Free medical treatment and drugs (but not appliances) to the wives, children, parents and parents-in-law dependent upon the member, up to 13 weeks.
(9) In case of death of wife or child, a funeral benefit of 40 marks (respectively 20 marks).
(10) Care in special institutions.

The following imposing figures indicate the extent of the activity of this institution:

In the year 1913 it paid money compensation for 90,659 cases of sickness of its members, accompanied with disability and loss of earnings, compensating for 2,359,471 days of loss of time.

The amount of medical aid granted is measured by equally large figures. The insured members themselves received the benefit of 1,084,940 consultations in the physicians' offices, 138,612 physicians' visits at the patients' homes, and 100,542 major and minor operations, or altogether 1,334,094 units of medical service.

In addition, the dependents of the insured members received 492,741

consultations, 285,569 home visits and 52,670 operations, or 830,980 units, making a grand total of 2,165,074 units of medical aid.

Hospital treatment was granted by the fund to the members only. In one year, 10,097 cases were sent to the hospitals with 295,564 hospital days.

Maternity benefits, including medical aid, were given to 3,916 women. Funeral benefits were paid for the deaths of 1,550 members, 498 wives of members, and 2,432 children; 2,588 patients were treated in summer resorts and medicinal baths, and 2,421 in homes for convalescents; 443 persons were treated in a special institution for nervous diseases; 26,342 medicinal baths and 5,605 massage treatments were administered.

These are only the most important of the forms of aid given, all of it to persons of very modest wage and salary income and without a single appeal to charity, at the total cost of $2,286,885, but with due consideration of differences in costs and standards, probably equivalent to a $5,000,000 budget in a California community. All this work was done at the expense of 8 per cent for administration.

It is impossible to contemplate these figures without recognizing that the activity of this institution could not help being productive of great results for the community of Leipzig in relieving many cases of potential destitution, in alleviating suffering and conserving the health of the community.

Critics of the German system have pointed out that the Leipzig figures show an increase in disability due to sickness from 8.6 per member per annum in 1889–1893 to 10.5 in 1909–1913. But this is largely due to the increase in the duration of benefits granted by the fund and better care taken of its members. As against this the mortality has decreased within the same 20 years from 8.98 per 1,000 in 1889–1893, to 7.66 in 1909–1913, a decrease of some 1.5 per cent in 20 years.

Opinions of observers corroborate the impression which these illustrative figures convey. During a hearing before the Committee on Labor of the United States House of Representatives on April 6, 1916, the well-known actuary, Mr. M. M. Dawson, testified as follows:

> "I wish to premise what I say by two statements, which I think will be of service to the committee in that respect. Both of these statements are from Dr. George Zacher, the greatest authority upon the subject of social insurance in the world. * * * One of them is that from the actual statistics collected by the government of Germany there was an increase in the average longevity of the German males, the men of Germany, from the year 1870 to the year 1900, during which social insurance had been introduced and made effective in Germany, equivalent to 12 years added to the life of every man in Germany.
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> * * * * * * *
>
> "The reputation of Germany in regard to mortality has changed from that of one of the worst in Europe during that period, and

has been improving steadily up to the present time, at least up to the time that the war commenced, from that position to one of the very best. * * *

"The other statement made was this: That the experience of the government in connection with this investigation was that not only the health, but also the height, the weight, physical strength, and ability of those who were called into the service of the German army had been one of steady improvement, showing a very marked difference between 1870 and 1900, and also, even between 1900 and 1910.

"Those are two facts which might be contrasted with the conditions which exist in other countries. * * * During that same period there was not only no such improvement in Great Britain, but in addition, there was a very considerable diminution in the average condition of those who offered themselves for service in the British army—so marked a loss that public attention was repeatedly called to it.

* * * * * * *

"There is a third consideration that I believe should be brought especially to your attention. Dr. Frankel and I found, that the remarkable improvement in the efficiency of the people in connection with the industries of these countries, an increase in efficiency, which, as you know, has attracted world-wide attention, which changed the reputation of German workmen from that of a rather thorough but exceeding slow and plodding type of workman, which was their reputation when I was a boy, to that of easily the most efficient workmen of all Europe, and made the Austrians, in spite of the fact that they were so badly broken apart in regard to race conditions, only second to the Germans in that regard—that this increase in efficiency, while undoubtedly partly due to the introduction of special schools in Germany and Austria, meaning vocational education, and also partly due to the introduction of compulsory military service, and the creation thereby of a special form of discipline, was chiefly due to social insurance.

"Now, this was not the testimony merely of those concerned, like my friend, Dr. Zacher, in social insurance. It was their testimony without a single exception; but yet more was it the testimony of the leading employers of Germany, many of whom were consulted by us, and many others consulted by others, and what they stated about it made public; and it was the testimony of the officers of the German government generally; and moreover, it was also the testimony of the leaders of the social democratic party, which represents virtually all of the workmen of Germany, and of all the representatives of the workmen of Germany in the sickness insurance associations. All but universal is the expression of opinion among those who have been consulted upon the subject, by, for instance, Lloyd George, representing the British government; and you will find it made public in the documents published giving the results of his interviews, and by those who were consulted by Dr. Frankel and myself, and those who have been consulted by innumerable others who have gone there from our own country, as well as from other countries, that the principal thing operating to make a wonderfully efficient, healthy,

long-lived people, was the thing which we are here to talk concerning today."

The above statements refer almost exclusively to Germany; but in other countries similar results, though to a lesser degree, are beginning to manifest themselves.

It is generally recognized that the British national health insurance system is less efficient than the German. Medical service is furnished scantily only, there are no hospital benefits, and there are many other serious limitations. The well known English writers on labor problems, Sidney and Beatrice Webb, criticized the health insurance proposals severely at the time of their introduction, and have often been quoted since then as opposed to the whole compulsory health insurance method. It is recognized that the criticism of the Webbs was made from an entirely different angle than that of the usual opposition, namely, that the health insurance law did not go far enough in the socialized care of the sick workmen. Early in March, 1914, a special investigating committee, with Mr. Webb as chairman, published a very careful report of the results of investigation of the British health insurance system, then very new and still in the midst of the formative stage. In the report many shortcomings of the system are disclosed with complete frankness. The more significant is the following introductory statement:

"We can not pretend to measure the advantage, to individuals or to the community, of the really gigantic provision thus made for the periods of incapacity—however far short of completeness or perfection the provision may be deemed."

And, again, in conclusion:

"We do not pretend in this survey, to give any vision of the social results of the National Insurance Act—to gauge the relief afforded in sickness and poverty, or the advance in health and productive power that its truly gigantic operations can not fail to be bringing about."

In the opinion of the Webbs, and many others quoted, the preventive effect has already been indicated. The activity of the Leipzig sickness insurance fund was quoted above to indicate the possibilities of preventive work which arise in connection with social insurance institutions. The great importance of this work of prevention is well stated in the following words of Mr. H. W. Dawson in the preface to his study of "Social Insurance in Germany":

"No one who has followed the development of the German social insurance systems and who knows the immense educative influence which they have exerted upon the working classes can doubt or wonder that it is the preventive work of the insurance organizations—as applied alike to disease and accident—which most appeals

> to the imagination, sympathy, and confidence of those in whose interest these laws have been passed. For, after all, in Germany, as here and everywhere, what the self-reliant workman values more highly than distress benefits is a fair and full use of his faculties. What he wants is not sickness pay, but a healthy life; not accident compensation, but sound limbs and unimpaired energies; not infirmity pensions, but the opportunity and the power to follow as long as possible the employment of his choice. Hence in their aggressive campaign against disease and their constant endeavor to lessen the risks to limb and life in industrial occupations the insurance authorities have from the first been conscious of the good will of the working classes, and have from no quarter received greater encouragement and praise than from the recognized leaders of organized labor. It is not too much to say that the many-sided preventive work which is being done by these authorities constitutes so far the peculiar distinction of the German system of social insurance."

A recent work by Dr. Paul Kaufmann, president of the Imperial insurance office, is devoted to the preventive efforts of the German workmen's insurance system. The study takes up the following aspects of the preventive work:

General medical aid, accident prevention under compensation, organization of first aid for industrial accidents, specialized medical and surgical treatment for accident cases for the purposes of reducing disability, placing of injured workmen in industry, general institutional care for chronic invalids, special measures for treatment of tuberculosis, and the indirect effect upon housing reform and other methods of social welfare through investment of insurance funds. "It may be pointed out," says Dr. Kaufmann, "that preventive work lies outside of the field of insurance, the purpose of which is to equalize and distribute and not to prevent the loss.

"In fact, indemnity as the insurance purpose occupied the first place in the practice of German workmen's insurance in its early stages. Only after some years, when the initial difficulties were overcome, did the principle gain recognition that the highest objects of insurance are not reached through distribution of the losses sustained; that protection against loss of earning capacity was more important than the care of the incapacitated and that every preserved productive life represented an important national asset."

On the other hand very different estimates of the general social results of the German social insurance system have appeared, which can not be disregarded. These consist mostly of medical literature calling attention to the problems of malingering, traumatic neuroses and even pension hysteria. In addition, there is a much more limited amount of economic and sociological writing concerning the general effects of the German social insurance legislation upon the working

class and the general economic conditions of the German empire. In the latter writings the medical literature referred to has been very freely drawn upon, so Professor L. Bernhard in his study "Undesirable Results of German Social Legislation" lists 78 such medical publications between 1889 and 1912, that is during a period of 24 years, which of itself does not appear to be an indication of very alarming conditions. Of the economic literature, two pamphlets have attracted particular attention: that by Professor L. Bernhard, referred to above, and a study by Dr. Ferdinand Friedensburg, entitled "Die Praxis der Deutschen Arbeiterversicherung." Both have been translated into English and published for wide distribution by the Workmen's Compensation Publicity Bureau, an organization of private casualty insurance companies.[1]

Professor Bernhard's study is directed not only against the German social insurance system but other branches of social legislation, as for instance government control of private enterprises and government extension into industry, party rule, etc. The part of the study devoted to social insurance contains some 30 to 35 pages of evidence of simulation, pension mania, traumatic neuroses and exaggeration of disability. Almost the entire evidence is taken from the field of accident compensation. The only charge against the practice of sickness insurance is that "unemployment, which is so prevalent in the building trades in winter, leads to an increased indication on the part of those insured to report themselves as disabled on account of slight ailments," and that in general, sickness insurance is frequently made use of as a way of insurance against unemployment.

This is a well recognized by-product of sickness insurance even in American fraternal orders and trade union funds, but a slight exaggeration of total sickness volume resulting from absence of unemployment insurance does not appear as a very serious offset to the tremendous work of prevention and the life and health preservation accomplished by the German sickness and invalidity insurance systems.

The evidence of malingering and the like under the compensation law presented by Professor Bernhard is more voluminous. But he himself admits that it is not a destructive feature of the German workmen's insurance; that long before its development, "railroads and insurance companies had to carry on a constant warfare against unjustifiable demands, that members of the 'upper classes' also were distinguished for exaggerating their injuries until attainment of an indemnity cured them with extraordinary rapidity, and that the desire to derive a profit from

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[1]It may be worth while pointing out that the title of Dr. Friedensburg's pamphlet was translated somewhat inaccurately into English as "Practical Results of Workingmen's Insurance in Germany." The German term "Praxis" means the "practices," the "mechanism," or "the methods of application." Dr. Friedensburg really endeavored to criticize certain methods, in his opinion harmful, rather than the results of the system in its entirety, or the principles of social insurance.

an accident is an entirely normal occurrence even with the best of our people."

To place a definite valuation upon such "undesirable results" it would be necessary to measure their frequency, but no such measurement, beyond a recital of various experiences by individual physicians is given. One may readily agree with Professor Bernhard that the system of small, inconvertible life pensions for comparatively unimportant injuries is undesirable and that lump sum payments in such cases are less likely to keep the claimant either in a state of worry about his pension or in a mood to simulate and malinger. However, an impartial reading of his evidence does not lead to the conclusion "that workingmen's insurance legislation is showing undesirable moral and hygienic results, which were originally regarded as a necessary evil but which are gradually making the blessings of workingmen's insurance appear very questionable."

Such a sweeping condemnation of a system which had developed for 30 years, which had been more or less imitated by the entire civilized world, and costs thousands of millions of dollars, would appear to be a very serious matter indeed if justified.

The criticisms of Dr. Friedensburg have been even more frequently quoted. They cover a wider range of topics embracing all the branches of social insurance. The main criticism may be summarized as follows:

> "According to the author: (1) workingmen's insurance has imposed upon German industry an enormous financial burden, interfering with Germany's position in the international market; (2) the methods of administration are cumbrous and the cost is excessive; (3) "social sympathy, humanitarianism or whatever other feelings these unhallowed catchwords cover" have been substituted for legal justice, both in courts and administrative bodies, thus demoralizing the German nation; (4) an enormous amount of malingering exaggeration, wilful aggravation and even self-infliction of injuries has developed; (5) the workmen have been taught the love of litigation; (6) they have been pampered by excessive generosity in grants of pensions and by excessive luxury in hospitals, in food, drink, medical care and nursing; (7) the original aim of social insurance, reconciliation of classes, has failed, and the general unrest has only been aggravated; (8) the Social Democrats have had a very bad influence, especially in the management of the sick-benefit funds, often conducting anti-governmental agitation in the committees; (9) the tendency of many employers to pay the workmen's share of old age pension dues is declared to be a vicious one; and (10) alarm is expressed concerning future extensions of the system."

Again since Dr. Friedensburg does not deny the essential justice of the social insurance provisions, but only the supposed inefficiency, extravagance and excessive liberality of the administration, a careful

measurement of the evil results would be necessary before a final estimate is possible.

The important question arises, how far are the views of Bernhard and Friedensburg accepted by most students of the German social insurance system. Dr. B. Zahn, a recognized authority, states that Dr. Friedensburg's "conclusions have been rejected by most authorities and impartial critics of the German workmen's insurance because of their evident one-sidedness and gross exaggeration." Among such authorities may be mentioned Dr. Paul Kaufmann, the president of the Imperial Insurance Office. A well-known German surgeon, Dr. Otto Hintze, refers to such charges of the weakening of the German workman's sense of responsibility and productive energy as a "monstrous exaggeration."

The entire structure of social insurance is also attacked on its economic and financial grounds as being an unwarranted burden upon the wages, upon industry and upon the state treasury.

It is obviously illogical to speak of the burden of social insurance upon the budget of the wageworkers, since the benefits all accrue back to them. The only additional burden would be the cost of administration, but since this is only a small proportion of the whole cost, and very much smaller than contribution from employers and the state, the wageworkers are evidently gainers thereby. Only then could the cost of social insurance be charged as a burden to the wageworkers, if it came as a substitute for some other method of supplying the same indemnities and services without cost to the wageworkers.

The combined cost of sickness, invalidity, old age insurance (accident compensation being paid for entirely by the employers), says Mr. H. W. Dawson, varies greatly, but it is probable that the predominate ratio is rather over than under 3 per cent of wages, while 4 per cent is not uncommon.

The cost upon the employer is approximately the same.

Mr. Dawson quotes the following twenty-one examples of combined charges upon industry:

Kind of establishment	Combined ratio in per cent of wages
1. Steel	3.4
2. Iron and steel	3.7
3. Locomotives and cars	4.2
4. Locomotives	3.7
5. Machine tools	4.0
6. Machinery	3.7
7. Machinery	3.1
8. Machinery	3.5
9. Electrical engineering	2.6
10. Electrical engineering	2.4
11. Automobiles	2.6
12. Shipbuilding	4.0
13. Coal mining	5.4
14. Coal mining	8.2
15. Chemicals	2.9
16. Chemicals	3.0
17. Chemicals	4.0
18. Glass	5.1
19. Paper	4.0
20. Cotton spinning and weaving	4.0
21. Cotton spinning	2.2

The average cost of the 21 forms was 3.8 per cent of the payroll and this burden did not appear to injure the standing of German industry in the world's competitive market.

It is reasonable to assume that the cost of health insurance was returned to the employer in increased efficiency, and in like manner the cost of invalidity and old age insurance was returned to the employer in increased efficiency, while the cost of invalidity and old age insurance was offering a practical remedy against the evils of superannuation.

The burden which the German social insurance system has placed upon the state treasury is not very great; amounting to only $10,000,000 or $12,000,000 it hardly raises any serious fiscal problem.

The total financial burden of the German social insurance system is, of course, substantial, if the term burden is the proper one to apply. Evidently from the viewpoint of social results, the substantial volume of financial aid falling to the benefit of the wageworkers is an indication of the efficiency rather than the burden character.

The following total will indicate the total volume of contributions made toward the support of the German social insurance system for the 29 years 1885 to 1913, inclusive. The grand total amounts to the very substantial figure of $3,195,488,336, to which must be added an income

from interest and other sources of $353,214,134, making the total income of the system $3,548,702,470.

	Accident, 1885–1913	Sickness, 1885–1913	Invalidity and old age, 1885–1913	Total
Contributions by employers	$709,059,663	$460,471,761	$418,026,865	$1,587,558,289
Contributions by insured persons	----------	997,922,005	418,026,865	1,415,948,870
Subsidy by empire	----------	----------	191,981,177	191,981,177
Totals	$709,059,663	$1,458,393,766	$1,028,034,907	$3,195,488,336

NOTE.—For an exact showing the share of the Empire should include the administrative expenses which are largely borne by it, but in what proportions can not be stated.

The assets at the end of 1913 were as follows: Accident insurance, $142,291,870; sickness insurance, $88,974,872; and old age and invalidity, $501,107,001; total, $732,373,743. It follows that during these 29 years over $2,816,000,000 were spent for purposes of relief of need and suffering. These figures, however, include the combined operations of nearly three decades.

It is interesting to quote the corresponding figures for the year 1913 alone.

	Accident	Sickness	Invalidity and old age	Total
Contributions by employers	$46,333,983	$38,246,695	$32,536,813	$117,117,491
Contributions of insured persons	----------	77,662,565	32,536,813	110,199,378
Subsidy by empire	----------	----------	13,106,494	13,106,494
	$46,333,983	$115,909,260	$78,180,120	$240,423,363
Interest, etc.	8,231,920	5,349,979	17,005,148	30,587,047
Totals	$54,565,903	$121,259,239	$95,185,268	$271,010,410

In referring to these combined figures of cost an American writer, H. G. Villard, speaks of the astonishing growth of economic burden that Germany is called upon to carry. According to the figures quoted by him the total cost increased as follows:

1891	$ 33,000,000
1901	93,000,000
1911	182,000,000

and he says, therefore, "unless a halt is called in time the load of this social legislation, heretofore successfully carried, may become a crushing one for German trade and industry." It may be noticed, however, that the figures of increased insurance operations are usually taken as evidence of financial strength rather than financial burden.

In Great Britain, the fiscal aspects of social insurance are more

important because the active cost of old age pensions, a substantial part of the cost of health insurance and also of unemployment insurance, is borne by the state treasury.

The total appropriations for old age pensions, labor exchanges, insurance, etc., in the appropriation act of 1914 amounted to £22,129,750 ($107,694,428), and the estimates for 1915–1916 were almost equally large, £21,787,158 ($106,027,204).

Roughly this expenditure of over $100,000,000 was distributed as follows: Old age pensions, about $65,000,000; unemployment insurance, including expenses for labor exchanges, some $5,000,000, and the remaining $30,000,000 is the state's contribution to the health insurance system. (See this report, page 169.) This is not an inconsiderable sum. But in view of the social good it has accomplished, in view of the enormous expenditures which the British nation with all other nations of Europe is at present spending on work of destitution, how can anyone argue that the expenditure of $100,000,000 annually, or $2.50 per capita, for the care and cure of the sick, the support of the aged and the unemployed, for hospitals, sanatoria and labor offices is a burden upon the finances of the country?

CHAPTER VII.

EXISTING FACILITIES FOR INSURANCE OF WAGEWORKERS IN THE UNITED STATES.

SECTION I.

IN GENERAL.

Even though the movement for social insurance as a governmental or social policy is very recent, and only gathering strength, a great variety of methods of providing insurance or pensions for wageworkers and other employees has grown up during the last half century, and it can not be said that the problem of the worker's insurance has been altogether neglected in this country. In fact, when the German expert on social insurance, Dr. George Zacher, requested Professor Charles R. Henderson of Chicago University to prepare a study of conditions in the United States for his very comprehensive five volume series "Die Arbeiter Versicherung im Auslande" (Workmen's insurance in Foreign Countries, Berlin 1891–1908), the result of Dr. Henderson's work was a very large volume.

The efforts have come from so many directions and are of so many different kinds, that perhaps a detailed classification will help the general view of the situation.

The following classification has been adopted from Dr. I. M. Rubinow's "Social Insurance:"

I. Institutions conducted by workers exclusively for the benefit of workers—
   (*a*) Trade unions, national.
   (*b*) Trade unions, local.

II. Institutions, conducted exclusively for workers, but either entirely by employers or with their participation or under their influence—
   (*a*) Factory funds.
   (*b*) Railroad funds.
   (*c*) Store funds.
   (*d*) Miners' funds.
   (*e*) Employers' pension system.

III. Institutions of a mutual nature, not limited to wageworkers, but drawing a substantial part of their membership from the—
   (*a*) Fraternal orders.
   (*b*) Local lodges.
   (*c*) General mutual benefit societies.
   (*d*) Special sick benefit societies.

IV. Insurance companies operating among all classes of the community, but drawing its clientele primarily from the working class—
   Mutual industrial life insurance companies.

V. Same as above—but stock companies, operating for profit—
   Industrial life insurance companies.
   Casualty companies.

VI. Governmental agencies limited to government employees—
  (*a*) Municipal pension funds:
    Teachers.
    Policemen.
    Firemen.
    Other employees.
  (*b*) State pension schemes.
  (*c*) National army and navy pension systems.

VII. Governmental agencies not limited to government employees—
  (*a*) The national military pension system.
  (*b*) The Massachusetts savings bank plan.
  (*c*) The Wisconsin state insurance plan.

It may be questioned in how far the military pension system should be properly classified with general measures, or with those provided for government employees. It is true that they are given in return for some government service, and yet the enormous sums for war pensions are paid largely to civilians and their widows, and the number of pensioners is sufficiently large to constitute it a peculiar selective old age and widowhood pension system.

Even outside of these the variety of the existing systems is very large. Unemployment benefits are given by trade unions only, but other forms of insurance are practiced by institutions of almost all other types, so that it is rather difficult to state definitely which of the forms of workmen's insurance is the most familiar to the American wageworker, except that of life insurance for small amounts, more accurately designated as funeral insurance, which has been developed to a very large extent by the large industrial life insurance companies. Trade unions give sickness and disability benefits; some grant them to invalids and the aged and many have provisions for small death benefits.

Establishment funds of various kinds go in largely for disability benefits, and with the extension of the compensation legislation, they concentrate largely at present upon sickness benefits or health insurance. And yet in case of large employers, these societies and funds provide more and more for old age pensions, in a few cases through mutual contributions, but more frequently within recent years, at the exclusive expense of the employer. Some large employing corporations have a certain amount of life insurance either directly or through group insurance with ordinary life insurance companies.

Mutual benefit organizations, organized either in the form of large national fraternal orders, or in local lodges, or in some other form and name, have a very wide patronage. The insurance activity of fraternal lodges has been mainly in the line of inexpensive assessment life insurance, but a good many of them practice health insurance as well. A number of smaller mutual benefit organizations have also grown up, which usually furnish health insurance.

Large life insurance companies, either mutual or stock, write primarily "life insurance," which, in view of the small amount of insurance carried, is more frequently only funeral insurance. But it is usually overlooked that the popular endowment policy is really a combination of life insurance and old age insurance. And though endowment insurance (on account of its higher cost) is less popular with the wageworker than others, some is being written among them. At least one large life insurance company has tried the experiment of writing health insurance for groups of wageworkers, but it has not been adopted to any large extent.

Other stock insurance companies, commonly known as casualty insurance companies, write health insurance to a considerable extent, and some of them specialize in the so-called "Industrial Accident and Health Insurance," on a plan of small monthly payments. This is intended primarily for the wageworker, or any person of small income.

Finally, there are a large number of governmental systems and funds for payment of old age or disability pensions to public employees. In these efforts, municipal have done more than state governments, and the federal government has not as yet established any system of pensions for its civilian employees, notwithstanding an agitation of many decades.

The existence of all these numerous plans and systems indicates that American wageworkers appreciate the necessity of protection against various hazards, and shows the value of insurance as a method of furnishing this protection. It also proves that a growing number of employers have learned the value of such insurance provision, both to the workers and to their own enterprises. It is unfortunately impossible to state definitely how large a part of the need these numerous forms of organization meet. Statistical data are very scant.

SECTION II.

TRADE UNIONS.

The benefit features of the American labor organizations are as old as the American trade union movement, but only since 1880 has there been any considerable increase in such activity. The development since then has been substantial. There is still a difference of opinion as to how far these beneficiary features were helpful to the trade union movement. Arguments are made that since the expense of maintaining benefits makes the dues of membership higher, persons who might otherwise join the unions are prevented from doing so; also that this benefit feature detracts the attention of the labor organizations from their main purpose of improving conditions of employment.

It is maintained, however, that the establishment of benefit features is a direct aid to a union in carrying through its trade policies; that systems of benefits, if they do not attract them, are successful in retaining members, and that sharp and sudden declinations in membership during industrial disturbances are thus prevented, and that it is a vital aim of the trade union policy to retain in hard times what has been gained in good times. This seems to have been proved in the fluctuation of membership of various unions in the depression of 1893–97. In any case during the 25-year period, 1880–1905, a very large number of fraternal trade unions had established benefit funds, as is shown by the government report. The Amalgamated Society of Carpenters and Joiners, the Cigar Makers International union, the United Brotherhood of Carpenters and Joiners, the National Association of Letter Carriers, the Brotherhood of Painters, Decorators and Paperhangers, and the several brotherhoods of railway employees, namely the Grand International Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen and Enginemen, the Brotherhood of Locomotive Trainmen, and the Order of Railway Conductors, all showed the largest development of benefit features. Of the total amount of $7,829,121 paid out by the national labor organizations, the four railroad brotherhoods paid over 60 per cent. Professor Charles R. Henderson states that for 1905 the national unions of the American Federation of Labor paid out in benefits as follows:

Death benefits	$742,421
Death benefits, widows	24,800
Sick benefits	582,874
Out-of-work benefits	85,051
Other benefits	68,170
	$1,503,316

It is doubtful if there are as many as half a million men insured for any benefit through these national unions, outside of the railway brotherhoods.

It is difficult to say how far these activities have increased during the ten years which have elapsed since the preparation of the government report. The commission is informed that the United States Bureau of Labor Statistics has recently undertaken a new study of trade union benefit funds, which will indicate the degree of the recent developments.

It is obvious, however, that this development has not been proportionally great when the needs of the masses of wageworkers are considered.

1. The brief list of unions with a substantial development of benefits indicates that only the best paid trades are represented, as the railway brotherhoods, carpenters, painters, cigarmakers, etc.

2. The death benefits remain the main line of activity, and whatever the influence of the death benefit in increasing the cohesiveness of the labor organizations, the economic importance of these benefits as a measure of poverty prevention is not very great. The average amount of the death benefit is small.

	Number of deaths paid for	Total amount paid	Average amount
Four railway brotherhoods	2,352	$3,776,599	$1,605
All other national unions	7,686	1,387,786	182
Totals	10,038	$5,164,385	$515

In other words the railway brotherhood men were the only ones which granted death benefits that represented a substantial amount of life insurance. As far as the other unions are concerned their death benefits are comparable to the funeral insurance of the industrial life insurance companies and have very little economic significance.

Counting in both the national and local unions, the memberships protected by sick benefits through labor organizations listed in the government report of 1908 probably did not exceed 400,000, of which 300,000 were insured through the national union and 100,000 through local unions. Since the list of the latter was manifestly incomplete, it is possible that the actual number of workmen insured against sickness through labor organizations may have been 500,000 or 600,000. But it represents an insignificant proportion of the wageworkers of the United States.

Moreover, the quality of the insurance service as well as the quantitative extent are also subject to very material limitations. The data for eleven national unions, with a membership of some 140,000 seem to indicate an average sickness rate of five days per capita. This unusually low sick rate (in comparison with any European data) is explained by

several limitations. There is usually a waiting period of at least 7 days, the duration of benefits is seldom over 13 weeks, and often drops to 10. A full year's membership is required before any benefits are paid. The amount of weekly benefits is small.

The same conditions characterized the local union benefits for temporary disability in 1906 and undoubtedly still characterizes them at present, for there has been very little tendency to enlarge the benefits. The rate of weekly benefits was subject to many fluctuations and varied from $2 to $10.

Weekly benefits	Number of unions paying
Less than $5.00	90
$5.00	166
$6.00	17
$7.00	41
$8.00	7
$10.00	24
$12.00	1
Total	346

Only 82 unions, or less than 25 per cent, gave benefits over 13 weeks, and over one-third limited them to ten weeks or less.

The requirement of a certain period of membership to establish the right to temporary disability was enforced in 275 out of 346 funds. This period amounted to:

Length of membership required	Number of unions
Less than 3 months	31
3 months	60
4 months	1
6 months	158
9 months	1
12 months	24
Total	275

When all these restrictions are considered with the small amount of weekly benefit and the absence of medical benefits, the role of unions as a factor in the health insurance of the twenty-five or thirty million wageworkers of the United States becomes a modest one.

SECTION III.

FRATERNAL ORDERS.

The fraternal orders are the greatest effort in cooperative noncommercial insurance in this country. While there are some fraternal orders which are exclusively social in their purpose, most of them are engaged in some form of mutual insurance, mainly life insurance, and next in importance, in health insurance. Notwithstanding their importance in the social and economic life of the American people and the large amount of literature on the subject, accurate statistical information is incomplete. The following table taken from the Insurance Year Book for 1915 indicates the truly gigantic dimensions of their activity in the field of life insurance:

Life Insurance by Fraternal Orders.

Year	Companies	Assessments in dues	Paid for claims	Paid to agents and for management	Insurance written	Insurance in force at end of year	Certificates in force
1901	489	$72,242,667	$64,128,047	$8,850,097	$799,626,678	$5,656,453,465	4518955
1905	570	91,354,819	72,551,897	11,349,269	1,026,308,429	8,150,350,736	6118938
1909	645	82,572,326	89,899,541	15,579,139	1,203,403,691	8,920,716,227	7909626
1913	509	129,520,444	101,006,344	19,262,702	1,065,071,108	9,622,276,590	8058317
1914	498	125,981,863	98,585,384	17,454,401	1,079,569,596	9,171,284,227	7868554
1915	492	122,291,820	98,719,683	16,132,911	922,890,579	8,694,449,483	--------

In volume this activity compares well with that written by the ordinary old line life insurance companies:

	Number of policies in force	Amount of insurance in force
Ordinary life	8,284,281	$15,609,722,445
Fraternal orders	7,695,944	8,694,449,483

Though the table appears to indicate a very large shrinkage in the number of certificates outstanding, the accuracy of this is rather doubtful, since the compilation of the Insurance Year Book is far from complete, as the fluctuations of the number of orders indicate. Though the apparent decrease may be exaggerated, there is little doubt that the rapid increase in membership evidenced some years ago has ceased.

Fraternal orders are a very important manifestation of the need of cheap cooperative insurance, and of the many efforts, more or less successful, to achieve it. The dangers which often accompany the efforts to obtain insurance too cheaply, or below cost, are well known. The

actuarial problems of fraternal life insurance are well understood by professional actuaries and by many managers of fraternal orders. While many orders and other assessment life insurance schemes have failed in the past, and many others are struggling against severe odds, a healthy movement for sufficient reserves has been growing up among better fraternals for nearly twenty years, since the organization of the American Fraternal Congress.

It is well known that millions of men have been buying insurance in fairly substantial amounts through these channels who otherwise could not or would not have purchased it. That a solid actuarial basis is necessary to safeguard these orders is quite evident to anyone who has given careful thought to the matter. But the substantial advantages which these orders possess are: (1) Combining life insurance with desirable social intercourse, without which it would not be effected; (2) Selling insurance on low monthly premiums.

In view of the inevitably high cost of collection of premiums by house-to-house visitations, necessary under the methods of industrial life insurance companies, the fraternal orders undoubtedly deserve all the help and encouragement that only scientific government supervision can offer.

It is impossible to ascertain how far these fraternal orders meet the needs of wageworkers. The fact that there are some 30,000,000 industrial life insurance policies in force, seems to indicate that the masses of wageworkers prefer this form to the fraternal insurance. It would appear extremely unwise for a wageworker who carries a substantial amount of fraternal insurance (from $1,000 up) to go on paying the weekly premiums for small industrial policies as well, though as a matter of fact, a good many do so. But how many of the eight million fraternal insurance certificates in force belong to wageworkers it is impossible to tell. An investigation made by the Connecticut Bureau of Labor Statistics, very limited in scope and referring to conditions 25 years ago, is quoted by Professor Charles R. Henderson. From this it appears that some 25 per cent belong to the professional business classes, some 40 per cent are well paid mechanics, 11 per cent clerks and only 20 per cent are low paid mechanics. It is doubtful if there is any substantial representation of unskilled labor among the fraternal membership.

Even if, in absence of better data, it should be assumed that one-half of the people insured against death by fraternal orders are wageworkers, then 4,000,000 certificates or policies evidently cover only a small proportion of the American wageworkers.

Health Insurance Through Fraternal Orders.

Still less information is available on sick benefits, or health insurance, of fraternal orders, second in importance only to the life insurance. No investigation of this subject on a national scope has been made. Even

the list of fraternals giving such benefits is not available. Such benefits are usually paid by the local lodges entirely on their own responsibility, while the payment of death benefits is controlled by the central administration. Several fraternal orders which have not gone in for life insurance have developed sick benefits. In some orders the option whether to go into the field of health insurance or not is left entirely to the choice of the local lodges. While in case of some orders, this is forbidden to lodges, or in any case not practiced.

The strong movement within the fraternal orders to expand their health insurance activity at the expense of life insurance is very significant indeed. It is a recognition on one hand that the problem of sickness as a cause of poverty is as important as that of death, and on the other hand that there is a greater dearth of acceptable health insurance facilities as compared with life insurance.

The specific problems of fraternal health insurance, in so far as they have been ascertained in the investigations in California, are discussed in detail elsewhere. Primarily they are:

Absence of medical aid.
Changeable membership.
Insecurity in the soundness of the small local lodges.

How far these difficulties exist throughout the country it is impossible to say. While all these shortcomings may be corrected, the crucial test of this form of health insurance among wageworkers is the number of persons insured. On the basis of the California data a guess might be ventured that there are some five or six million persons insured for health in various fraternal orders in the United States, though how far this number should be reduced for duplications and how many of them are wageworkers no one can tell.

SECTION IV.

ESTABLISHMENT FUNDS.

Under this term are included all kinds of insurance aid organizations existing in connection with industrial establishments, and limited in membership to employees of that establishment. This is a type of insurance organization or fund that existed in every European country before the advent of compulsory insurance and was accepted into the system of compulsory insurance.

There are several distinct types of such funds in this country.

(*a*) An organization springing up voluntarily among employees and administered by them without assistance from the employer.

(*b*) An organization receiving either occasional subsidies or definite contributions from the employer, which may or may not carry with them the employer's participation in the administration of the fund.

(*c*) An organization, the management of which is absolutely centralized in the hands of the employer who makes membership a condition of employment.

(*d*) An organization or a system of benefits maintained and financed by the employer, without any contributions from the employees.

In the case of some small establishments, the benefits are provided by means of the purchase of group insurance policies from private insurance companies. Group policies can be purchased which grant protection against death, industrial accidents, nonindustrial accidents and sickness.

Establishment funds are more frequent among large employers of labor. They require for their successful administration, permanency of employees. They are found most frequently in—

Railroad companies,
Other public service corporations,
Department stores,
Insurance companies,
Banks,
Large factories and mills.

They are much less frequent in building or construction enterprises in which many millions of unskilled laborers are employed. Thus low paid labor is seldom protected through the medium of establishment funds.

Available statistics indicate that in nearly 75 per cent of the funds, the administration is entirely in the hands of the employees. In less than 20 per cent of the funds membership is compulsory. The rates of weekly contributions vary from 25 cents to $1 a week. Weekly benefits of $5 and $6 are the rule in more than one-half of the funds, and the predominating duration of benefits is 10, 12, 13 or 26 weeks. Over one-quarter of the funds are giving compensation for less than 13 weeks, and only one-eighth for over 26 weeks.

Superannuation and pension benefits are given by very few funds, and when given are usually in the form of service pensions.

The voluntary method of making necessary provisions has, of course, limitations. Depending as it does upon the initiative either of employees or the employer, the practice is far from universal. Voluntary efforts, however, usually precede legal enactment and are valuable in indicating what is feasible and wise. The number of establishment funds has been growing rapidly in the last few years, and this fact is an argument that conditions have become ripe for some comprehensive system of protection, brought about by legislative enactment.

SECTION V.

COMMERCIAL INSURANCE COMPANIES.

A—Industrial Life Insurance.

Like any other member of the community, a wageworker may purchase life insurance of the so-called "ordinary kind," and there are some wageworkers among policyholders of ordinary life insurance companies. However, the cost of life insurance under this plan appears to be too expensive for the mass of workingmen and persons of small salaries. This, on the one hand, has led to the development of fraternal insurance in the effort to obtain insurance at cost; and, on the other hand, it has given enormous popularity to industrial life insurance, which is life insurance of very small amounts, paid for in small weekly premiums.

The amount of industrial life insurance written and the increase in the number of policies in the last 40 years is shown in the following table:

Year	Insurance written during year	Insurance in force	Policies in force	Average amount
1876	$727,168	$443,072	4,816	$92
1880	34,768,035	19,590,780	228,357	86
1885	93,736,727	144,101,632	1,360,376	106
1890	242,250,959	428,067,245	3,875,102	110
1895	380,832,362	819,521,373	6,943,769	118
1900	566,087,936	1,468,474,534	11,215,531	131
1905	661,097,015	2,309,886,554	16,869,758	136
1910	749,717,264	3,179,489,541	23,044,162	137
1914	825,682,808	4,170,971,777	31,134,303	134

The average annual premium per policy in force is about $7.50, or some 15 cents per week. An enormous expense of administration is made necessary by the system of maintaining a large army of collectors making weekly visits to the homes of the insured to gather the nickels and dimes. Notwithstanding the recent efforts to reduce the expenses, their ratio to the total premiums for the largest industrial insurance companies fluctuates between 30 and 35 per cent, and if their industrial business alone should be taken, would be higher—between 34 and 38 per cent. Moreover, the premium volume, as stated, is exaggerated by the inclusion of dividends. If this element were excluded, the proportion of the expenses to the net cost would be higher.

A very large lapse ratio is another shortcoming of industrial life insurance. In the past, some 65 to 70 per cent of all the policies issued

have lapsed for nonpayment of dues. The larger companies are now making earnest efforts to reduce this lapse ratio. But even in 1914 the data for the two largest companies are as follows:

Policies ceased	First company		Second company	
	Number	Per cent	Number	Per cent
By death	163,339	11.5	132,900	8.5
By maturity	13,756	1.0	358	----------
By expiring	19,806	1.4	14,167	.9
By surrender	44,138	3.1	101,967	6.6
By lapse	1,180,854	83.0	1,311,317	84.0
Totals	1,421,893	100	1,560,709	100
Total issued and renewed	2,189,276	----------	2,356,034	----------

The resemblance of the figures for the two companies in the lapse ratio is rather striking. Of all terminated policies 83 to 84 per cent have lapsed. Even if the proportion to the policies issued is taken (which really makes the showing too favorable because with the rapid expansion of business an increasingly large number of policies is written each year, and therefore an increasing number of policies is lapsed), the proportion of policies lapsed or surrendered is 56 per cent for one company and 60 per cent for the other. Thus a very large amount of energy spent in obtaining this voluntary insurance and a very large amount of money paid by millions of wageworkers is a total social loss.

The average amount of insurance is so small that the insurance received by the family at the death of the insured is, in the majority of cases, spent entirely upon the funeral.

These remarks are not meant as an attack upon the industrial life insurance business maintained by the large commercial companies. The valuable work recently developed by some of the larger companies in social service to the policyholders in furnishing them with nursing aid, in their educational work in public health and personal hygiene, in their important scientific work in vital and social statistics and finally in their mutualization, is not to be disregarded. But the conclusion is inevitable that collectively American wageworkers pay a very large amount for industrial life insurance which meets only one of their many needs for protection. The expense of industrial life insurance companies also demonstrates the impossibility of inexpensive administration in voluntary insurance based upon a system of solicitation.

B—Insurance In Casualty Companies.

Though very much less imposing in its totals, insurance in casualty companies offers an additional medium for the protection of wageworkers at present. The term "casualty insurance" is not a very

definite one. The insurance carriers which write any line of insurance outside of life, fire and marine insurance, are designated as casualty or miscellaneous insurance companies. The latter term is perhaps somewhat more comprehensive in that it includes surety or bonding companies, though as a matter of fact many casualty companies also write surety business, while several of the large bonding companies have recently established casualty departments.

The casualty insurance business may be divided into two broad branches: personal insurance (accident and health, and also compensation, which is only group accident insurance); and property insurance, such as boiler, plate glass, burglary and similar forms. Liability insurance, a very substantial part of the casualty business, is often looked upon as personal insurance, but, as a matter of fact, is a contract for protection of property rights of the insured person. Disregarding compensation insurance, already discussed elsewhere, only the remaining forms of personal accident and health insurance interest us here.

The volume of this form of insurance is very substantial, though of comparatively recent growth. In fact until the recent development of workmen's compensation insurance, personal accident and health insurance was, next to liability, the most important branch of casualty business, the amount of annual premium reaching over $40,000,000.

Accident and Health Insurance by Casualty Companies.

Year	Premium	Losses	Per cent
1908	$23,078,288	$9,621,357	41.6
1909	24,609,374	9,484,121	38.5
1910	31,176,464	12,372,256	39.7
1911	33,097,540	14,537,883	43.3
1912	37,990,589	16,745,835	44.1
1913	40,671,835	18,203,285	44.8
1914	41,830,753	18,361,764	43.9
1915	41,091,739	18,535,646	45.1

While these figures indicate substantial growth, the total amount does not compare very impressively with the total loss due to accident or disease, since insurance for both accident and health is very much smaller in amount than for compensation (or individual accident) alone.

Again we are confronted here with lack of statistical information. Even the distribution into accident and health separately is impossible because some states do not require such distribution and the figures are given together.

The Insurance Year Book for 1911 gives these figures separately, and though admittedly not altogether accurate, they are fairly characteristic:

Year	Accident			Health			Per cent health to total premiums received
	Premiums received	Losses paid	Per cent	Premiums received	Losses paid	Per cent	
1901-1905	$65,572,736	$27,985,457	42.6	$7,157,396	$2,903,787	40.5	9.8
1906-1910	99,549,393	41,206,707	41.3	23,848,719	9,607,381	40.2	19.3
1896-1910	201,566,143	85,348,206	42.3	31,006,115	12,511,168	40.0	15.8

The division between accident and health given for sixteen large casualty companies for the decade 1906–1915 indicates that only 21.3 per cent of the total was for health insurance.

The tabulation of the data for various states as given in the Spectator's Insurance Year Book for 1916–1917 (pages A-228 to A-363) yields the following results:

	Premiums written	Losses paid	Per cent
Thirty-eight states reporting accident and health separately—			
Accident	$29,021,194	$13,105,202	45.2
Health	6,351,672	2,875,930	45.3
	$35,372,866	$15,981,132	45.2
Ten states reporting accident and health together	5,718,873	2,554,514	44.7
Total accident and health	$41,091,739	$18,535,646	45.1

Apportioning the undistributed amounts in the ten states in the same ratio in which accident and health business is represented in the other thirty-eight states, results as follows:

	Premiums written	Losses paid	Per cent
Accident	$4,691,763	$2,094,702	44.6
Health	1,027,110	459,812	44.8
Total	$5,718,873	$2,554,514	44.7

The total amount of business therefore is distributed approximately as follows:

	Premiums written	Losses paid	Per cent
Accident	$33,712,957	$15,199,904	45.1
Health	7,378,782	3,335,742	45.1
Total	$41,091,739	$18,535,646	45.1

The number of persons represented can not be ascertained, but various estimates place the average cost of policy at from $15 to $20. On this assumption there may be about two millions or less persons carrying personal accident insurance policies, and scarcely half a million persons insured through casualty insurance against sickness.

The business of so-called personal accident and health insurance is written in many different forms, some of which are entirely outside of the means of wageworkers. Included in these totals is an unknown amount for insurance against accidents which the traveling public purchases at 25 cents a day when buying a railroad ticket. The largest part of the forty odd millions is so-called commercial accident insurance, written at a substantial annual premium, or, less frequently, for premiums paid every three or six months. Such insurance is perhaps most frequent among professional and business classes, and the amount of insurance is sometimes very high, reaching occasionally to $100,000 or more in case of death or serious dismemberment from accidental injury. Most of these policies include weekly benefits in case of disability, from $25 to $250, the amount of insurance being limited only by the willingness of the insured to pay the premium and of the company to insure the risk. Competition between the companies has forced into the contracts many fanciful benefits, designated as "frills, or talking points," intended to facilitate the sale of the policies without risking very heavy losses. Double indemnity for travel accidents is, for instance, a common feature.

The health insurance contracts are much simpler, providing little beyond a specified weekly benefit during disability for a limited number of weeks. In the earlier years such health insurance contracts were issued for a limited, enumerated list of diseases. This was not popular. The standard casualty companies at present grant full coverage against all diseases in their health insurance contracts.

There are undoubtedly some wage earners and low-salaried employees who carry insurance of this kind, but their number is necessarily very limited, and is mainly found among the better paid mechanics. Not only is there difficulty in meeting the annual, semiannual and quarterly premium, but the cost of this insurance is not low. The loading imposed upon the actual cost of insurance is at least equal to the latter, or even exceeds it. Considerable persuasion and advertising appears necessary in this as in many other comparatively new forms of insurance. This causes a very high rate of commission. When all the other expenses are added, the total cost of administration often exceeds 50 per cent. The data of premiums and losses for various years and various companies, indicate a general "loss ratio" of some 45 per cent, and in fact the companies feel that the business results in a loss when the

"loss ratio," or, the ratio of losses paid to premiums received, exceeds 48 per cent.

These remarks apply to the entire business of accident and health insurance, whether written for the middle classes or wageworkers. Special forms of this insurance have, however, developed for the needs of the industrial population. These are mainly industrial accident and health insurance on a monthly or weekly premium basis, and factory or collective insurance, when employees of one establishment are insured in a group, the employer sometimes only collecting the premiums from the insured wageworkers, sometimes contributing part of the premiums, and occasionally paying the entire premium out of his own pocket.

The amount of this accident and health insurance business written by casualty companies on any of these plans among wageworkers, can not be determined accurately. In a hearing before the congressional committee,[1] Mr. Charles F. Nesbit, superintendent of insurance for the District of Columbia, testified concerning the results of this form of insurance:

> We have here about 90,000—sometimes over 90,000—wage-earning negroes in Washington. They form most of the casual labor—servants, day laborers, drivers and such workers as those. Among these people there has grown up a system of insurance against sickness. This has grown up largely in this section, and south of here in Maryland, Virginia and the Carolinas, and somewhat in Tennessee. The greatest problem with these people is that when they become sick their pay stops.
>
> To show you how thoroughly they try to insure against sickness in the District of Columbia, I will state that in this city they pay $500,000 in premiums. And out of that all they get back is $200,000—approximate figures.
>
> * * * * * * * * * *
>
> I find that all the other work connected with the insurance department is not so troublesome as taking care of these sick claims. These people come in and claim for one, two or three weeks sickness. It is impossible to go to court on a claim like that. It would not pay; and besides, these people could not afford it. It does not pay to spend $30 to get $6. It has given me more work, more trouble in taking care of these claims than has all the other work connected with the insurance department combined, largely because, I will admit, I permit it, for I feel that they are entitled to some consideration.
>
> I have figured this matter out for ten years, and I find that the sum paid in in ten years amounts to $40,000,000 all told, in sick and accident companies doing business in the district.
>
> * * * * * * * * * *
>
> In Washington alone it has been less than $4,000,000. I take these figures from their own statement, and do not differentiate between the district and other places. * * *

[1] Hearings before Committee on Labor, U. S. House of Representatives, by Congress, First Session, on H. J. Res. 159, April 6, 1916, p. 105.

Every time you collect $100,000 from the poorest citizens of this territory, it costs you $60,000 to collect it, and $40,000 is all that is paid back. They say that it can not be done for less; it costs that much money. That much money is taken away from our people here who are on the verge of going over the brink in the direst poverty. What is the net result? That they get 40 cents back out of a dollar of the hardest kind of earned money they give up.

* * * * * * * * *

The expenses are high, because the premiums are collected in small amounts of 10, 15 and 25 cents a week. Agents collect it by going around from house to house. We, of course, can not exactly tell these people how they should run their business. You can readily see, however, that it costs a great amount of money to collect money in small amounts like that, when you have to run around through the alleys of the city, sometimes calling three or four times in order to collect ten cents. That is going to cost money.

But that does not alter the fact that these people have to give up one dollar for every 40 cents they get back. It is a pathetic thing, and I can not tell you how pathetic some of these cases are. I remember a case that came before me the other day, of a colored woman who came here from out of town, from somewhere in Virginia. Not all these people are in the district, you understand; some of them are in the country. She came in and claimed $67 death benefits. The company offered to pay $30. There was nothing I could do about it; it was a matter of lawsuit or accepting this compromise. It was a matter which I could not settle. After I had told her what the facts in the case were, this colored woman, who sat there with a flannel cloth about her head, said: "That is about all we ever get out of anything. I guess we better take it."

It is not good for the people of the community to have to struggle this way and guard against the misfortunes of sickness and death in so inadequate a manner.

I have no charges to make against these people who run these companies. They do not reject one claim out of 16. Sixteen claims will be paid out of every 17 put up to the company. I call that a very clear record, and I find very few cases that come down to me that have merit in them; that is, I find very few meritorious cases that are rejected by the companies. It must be remembered, too, that these companies are dealing with people whom it is very hard to make understand cases of this kind.

However, this is an absolutely inadequate method. It seems to me that some inquiry should be included in this inquiry looking to taking care of this particular problem. That it is a serious problem is indicated by the figures that I have given for the city. When you consider the amount of money that is paid in by a limited part of our population—$450,000 a year—which is paid in in amounts of 10, 15 and 25 cents a week, you will realize how hard these people are struggling to provide against sickness. All kinds of people come to these companies. There are servants in houses, men working on the roads and streets, and all that class of people. When they get sick everything stops, as their pay stops. That is the terror

of life to them. There should be some better way to provide against sickness, or loss on account of sickness, among these people, than a system which exacts 60 cents out of every $1 that is paid in.

CONCLUSION.

The above brief review of the various forms of insurance for wage-workers developed in this country during the last half a century, and perhaps largely during the last 25 years, both through cooperative effort and through business enterprise, seems to indicate clearly the great difficulties which are in the way of all such efforts to meet the problem of need satisfactorily. The very variety of these efforts establishes the fact that the need of all such forms of insurance is keenly felt. But the results in most cases are far from satisfactory, either qualitatively or quantitatively, or both. Either the insurance is limited to comparatively few, or is subject to very great expense in the conduct of its business, or the social results are such as to offer little justification for the effort and cost. A good deal has been written about the energy and enterprise of American insurance companies in carrying insurance to a very high degree of development, and for this development in some lines of insurance, high credit is due to insurance enterprise. But as far as insurance among wageworkers is concerned the field of accident and disease has hardly been scratched.

CHAPTER VIII.

THE SOCIAL INSURANCE MOVEMENT IN THE UNITED STATES.

SECTION I.

IN GENERAL.

Of all the modern industrial countries, or at least those of a Caucasian population, the United States has seen the least development of social insurance. Less than a decade ago the term was practically unknown in this country. For this reason the marked interest in the whole program of social insurance displayed throughout the country within recent years is the more significant. A brief historical review of the growth of this suddenly aroused interest is of some importance, because outside the field of compensation and mothers' pensions little has been accomplished in actual legislation.

The striking and novel legislation which began in Germany did not attract very much attention among American students of economic problems at first, although a translation of the German invalidity and old age insurance act appeared as early as 1889. It was not until nearly a decade had elapsed that detailed studies of European legislation in this field began to appear in the United States. Most of these were made by economists in employ of government institutions rather than by university teachers.

In 1893 the United States Bureau of Labor published a comprehensive study of workingmen's insurance in Germany, by Dr. John Graham Brooks. The study failed to attract very much attention from the public at large, or even from students of economics. In 1898 the first general study of workingmen's insurance was made by Dr. W. F. Willoughby of the Bureau of Labor. Notwithstanding its very elementary nature, it long remained the only authoritative work on the subject in English.

In 1899 the New York State Bureau of Labor published a more comprehensive study, devoted to the problem of accident compensation and insurance in Europe. Gradually the problem of possible adaptation of these European institutions to American conditions began to force its way to the foreground, and soon the rather limited stream of scientific literature was overtaken by a very strong current of popular propaganda literature in which the popular magazines participated.

The problem of compensation, or insurance for industrial accidents, was first approached. In this the United States only followed most European precedents, since in all countries, except Germany, accident insurance laws were the first passed.

The American system of dealing with industrial injuries was becoming more complex, more expensive and more wasteful. It clogged the courts, stirred antagonism between employer and employee without

meeting to any extent the problem of destitution caused by industrial accidents. The adoption by Great Britain of a very weak compensation act in 1897 directed the attention of American legislators to the European methods of meeting the problem.

An effort was made in 1899 in the New York legislature to introduce a compensation law similar to the British act of 1897. But the representatives of labor rejected it, preferring to work for a more stringent liability law. This attitude of the labor organizations was quite characteristic for the time.

The first successful effort was made in Maryland, where, by the act of 1902, an employers' and employees' cooperative insurance fund was created for workingmen employed in mines, quarries and steam and electric roads, with equal contributions from both employer and employee, to be administered by a state official. It granted the sum of $1,000 in each fatal accident. Thus, with one bold stroke, a system of state accident insurance was introduced. But it was a very poor substitute, even for a system of liability, for in depriving workmen of all rights under liability laws, it granted the right of compensation only for fatal accidents, established an inadequate amount of compensation at a considerable cost to the workmen, who were charged one-half of the contributions.

The law was declared unconstitutional in 1904 on the ground that it deprived both parties of the right of trial by jury, and conferred on an executive officer judicial functions, for the law was administered in all its details by the state insurance commissioner.

Outside of this experiment, the first state to take a decisive step was Massachusetts. In 1903 a committee of five was appointed to study the relations between employer and employee, and the question of liability for industrial injuries was speedily recommended to its consideration. The committee recommended a fairly comprehensive bill on the lines of the British act of 1897, but the bill was rejected by the legislature on the ground that such a law would place an exceptional burden on the manufacturers of the state, and would cripple them in competition—an argument which, for many years, exercised a powerful influence in retarding compensation legislation.

In 1907 another joint committee was appointed by the Massachusetts legislature. The committee this time did not go as far as its predecessor, deciding by a small majority that the step was premature. They did, however, recommend an act which was passed by the legislature in 1908, authorizing employers to establish, of their free will, compensation schemes, which, if approved by the State Board of Conciliation and Arbitration, might serve as substitutes for the existing employer's liability. The law remained practically a dead letter, thus indicating

the futility of counting upon the good will of employers as a force to accomplish the necessary reform.

A similar movement commenced about the same time in Illinois. A commission containing representatives of capital, labor, law and economics was appointed in May, 1905, to study the entire matter of workingmen's insurance and old age pensions. The commission presented a draft of an accident insurance bill, the shortcomings of which it frankly recognized, but thought them justified by considerations of timeliness.

The plan provided for a voluntary compensation scheme, through a mutual insurance institution, with equal contributions from both employers and employees, and a very limited compensation scale. The bill met with the unanimous disapproval of organized labor, which destroyed all its chances for success. Manufacturers also resisted its extension of their liability.

In 1907 Connecticut also appointed a committee to investigate employers' liability, though it was not specifically ordered to recommend compensation legislation. The committee made a brief though fairly clear study of some compensation laws, admitted willingly all the virtues of the system, but could not agree to recommend a bill to that effect, mainly because of fear of interstate competition.

The modern compensation movement may be said to date from 1908. At least, during that year, it received a considerable impetus from the federal government. A compensation law for the employees of the federal government (who were in a peculiarly unfortunate condition in that they were not even protected by any liability law) became the earnest effort of the Roosevelt administration. Many references to it were made in the presidential messages, and in reports of cabinet officers. Finally congress passed a compensation act for the protection of some government employees, the act of May 30, 1908, very limited in its application, but famous as the first real compensation act in the United States.

Under the influence of these first steps, a large interest in the problem grew up. By the appointment of legislative commissions in Minnesota, New York and Wisconsin in 1909, the stage of commissions and investigations was inaugurated.

After the appointment of these three commissions the movement grew by leaps and bounds. Other states followed. In 1910 commissions were appointed in Illinois, Massachusetts, New Jersey, Ohio and by the United States government, and, in 1911, in Colorado, Connecticut, Delaware, Iowa, Michigan, North Dakota, Pennsylvania, Texas and West Virginia. In some states, as California and Washington, commissions were appointed by the governors without legislative authority.

While constitutional difficulties and many other local differences have produced a great variety of legislative results, the general principle of

compensation for industrial accidents has been adopted by the United States. Only 15 states had failed to adopt such acts at the end of 1916. Of these, only three states, Utah and both Dakotas, largely agricultural and with a very small industrial development, lie outside of the South, where social legislation has always been backward.

The enumeration of these official efforts and steps does not, however, give a complete historical statement of the development of the compensation legislation in the United States. The voluntary efforts of various organized social groups resulted in the enlightenment of public opinion.

The American Association for Labor Legislation, organized primarily for the study of labor legislation, rapidly developed into an active body for promotion of compensation legislation. In many states local branches were very active in drafting bills and conducting popular agitation in their favor. It organized a workmen's compensation committee which published model standards of compensation legislation, and also prepared the draft of a new compensation act for federal employees.

Other organizations of economic students also woke up to the importance of the problem. The Philadelphia American Academy of Political and Social Science called together a conference in April, 1911, and the New York Academy of Political Science in November, 1911.

The National Civic Federation, in which both employees and employers are represented, appointed a special department on compensation for industrial accidents and prepared a model draft of a uniform compensation law. The National Association of Manufacturers also appointed a special committee for the study of accident compensation, which went to Europe to investigate the subject and wrote a comprehensive report.

American labor organizations have changed their early attitude of opposition which appeared in New York in 1899, and in Illinois in 1905. The president of the American Federation of Labor has repeatedly appeared in defense of compensation legislation, and in many states, notably in New York, the local federations took an active part in the drafting of the bills. The legal profession, through the American Bar Association, has had for some years a special committee planning uniform compensation legislation.

The National Progressive Service published a detailed study of compensation standards. These are only isolated cases illustrating the public interest in the matter and the efforts of private organizations. They were duplicated on a smaller scale in most of the states.

The practical application of compensation laws soon raised the question as to a proper line of demarcation between an industrial accident and an occupational disease. The importance of extending the compensation system to occupational diseases was early recognized by advocates

of compensation. While this extension was accomplished by judicial interpretation of the law in a few states, the state of California has the distinction of being the only state to have included the occupational diseases by a special amendment, substituting the word "injury" for "happening of an accident." In this respect, as in many others in compensation legislation, California has taken a most advanced position, and will very likely be followed by a number of other states in the near future, because agitation for such amendments is very active.

SECTION II.

PUBLIC LIFE INSURANCE.

The two experiments in life insurance undertaken in Massachusetts and Wisconsin must here be briefly referred to, since they are evidence of the growing readiness to deal with these problems in a way that would have been unthought of in the United States some 20 years ago. Neither experiment has had any substantial influence upon problems of destitution.

Massachusetts.

The Massachusetts savings banks insurance system is not compulsory, and it is not in any sense a state insurance system, but it owes its existence to a legislative act (June 26, 1907), and by that act a general reinsurance fund under state supervision is created. The creation of this fund antedates the entire compensation legislation, and it has been designated "The first significant step towards social insurance in the United States." The purposes of the act are to give wage-earners of Massachusetts, through the sale by banks of insurance at cost, an opportunity to obtain safe life insurance at the lowest possible cost, as a substitute for the more expensive so-called "industrial life insurance." This low cost is sought by eliminating entirely the paid solicitor of insurance and the house-to-house collector of weekly payments and by eliminating profit. The state actuary furnishes the actuarial service, and the state medical director supervises the medical work without charge to the banks.

The premiums are only loaded to provide for the necessary expenses and provision is made for a safety reserve fund. The rates, fees and other charges, the reserve and loan values, etc., are uniform for all savings and insurance banks operating under the system.

The entire system is that of insurance at cost, or even somewhat below cost, because of the state subsidy for salaries of actuarial and medical departments.

The question is: How have the people of Massachusetts responded to this measure of voluntary social insurance? Of nearly 200 savings banks only four up to date, with 278 agencies in other localities, have organized insurance departments. The decade which has elapsed since

the enactment of the law has seen some healthy growth of the system, as is shown by the following statement:

Year ending October 31—	Total premium income	Number of policies in force Oct. 31
1909	$25,377 29	2,521
1911	76,348 92	5,063
1913	124,205 08	8,054
1915	164,058 96	10,892

The office of the state actuary states that on August 1, 1916, the number of policies outstanding reached some 14,000, and the amount of outstanding insurance some $6,000,000. But notwithstanding the substantial difference in the cost of insurance, especially when compared with that of industrial life insurance on a weekly payment plan, the total volume of transactions is almost insignificant. The industrial business in force with the five industrial life insurance companies in Massachusetts was 216 times as great as that of the savings bank insurance system. The number of policies issued was 147 times as great. After seven years of endeavor the savings bank system secured only about 1 per cent of the business in competition with the system which it was "organized" to overcome. The law was passed with the belief that the average man was wise enough to see the advantages of savings bank life insurance and that he would of his own initiative apply for insurance, whereas the "average man" did not do anything of the kind. Ninety-nine out of a hundred continued to take out industrial insurance policies at the solicitation of agents, and only one out of a hundred applied to the savings bank system.

The lesson to be derived from this experience is but a simple repetition of European experience, namely, that cheap state insurance, when purely voluntary, is a failure. The experience of the Massachusetts plan is additional evidence that a true social remedy must be sought in some application of the compulsory principle.

Wisconsin.

Notwithstanding the slight degree of success of the Massachusetts plan similar experiments are being advocated in many other states, and the principle of state life insurance is being strongly advanced as a method of bringing cheaper insurance within the reach of people of moderate means. Wisconsin is as yet the only state that has legislated in this direction, establishing a state life fund in 1911.

The Wisconsin plan differs from that of Massachusetts in that no intermediary similar to the savings banks is made use of. The insurance system may be classified as straight state insurance, because the

state not only creates but administers the fund. The state does not assume any liability beyond the amount of the fund.

The benefits are open to all citizens of the state. Policies of life insurance may be issued to persons between the ages of 20 and 50 in amounts of $500 and multiples thereof not to exceed $3,000. Annuities may be sold to begin at the age of 60 in sums of $100 or multiples thereof, not to exceed $300. It was provided that at least 200 applications for insurance amounting to not less than $100,000 of insurance should be received and approved before any policies could be issued, in order to prevent possible financial disaster at the beginning.

It took fully two years before the necessary number of applications was received and approved, and the first policies were issued October 27, 1913. Since then the development of the fund has been extremely slow as shown in the following tables:

Year	Income			Disbursements				
	Premiums	Interest and other	Total	Deaths	Other policy benefits	Return premiums	Management	Total
1913	$5,735	$331	$6,066			$235	$256	$491
1914	8,239	177	8,416		$450	196	300	946
1915	10,811	1,034	11,845	$2,000	640	98	979	4,712

Year	Policies issued		Policies in force		Assets	Liabilities	Surplus
	Number	Amount	Number	Amount			
1913	237	$146,400	237	$146,400	$5,601	$3,444	$2,157
1914	85	82,800	315	224,100	13,268	11,827	1,441
1915	71	70,500	381	289,600	20,458	18,729	1,729

It should be noted that the facilities for publicity were practically negligible.

From the standpoint of social insurance history there is nothing surprising in this experience. When voluntary methods of social insurance have had a comparative degree of success, there has always been the stimulus of substantial subsidies from the public treasury. When state insurance without subsidies, relying entirely upon the cheapening of insurance through elimination of profits and reduction in the cost of soliciting business, has succeeded, there has always been elimination of the private competitor. Nowhere in the history of insurance has the competitive state insurance plan succeeded by a direct appeal to the people without the aid of a subsidy, in the face of an active agency force agitating for private insurance companies.

SECTION III.

HEALTH INSURANCE.

An active movement for propaganda of the health insurance idea is the most recent of all social insurance movements in this country. It may be dated from the First American Conference on Social Insurance held in Chicago in June, 1913. Other organizations of similar character, as the American Public Health Association, the American Academy of Medicine, also undertook the study of the subject. The health preserving aspects of the health insurance plans attracted the attention of the American Medical Association, which organized a standing committee on social insurance, largely devoted to health insurance. The study and agitation for health insurance is not limited to private organizations. The Federal Commission on Industrial Relations undertook the study of health insurance and the majority report endorses the idea in the following words:

Much attention is now given to accident prevention, yet accidents cause only one-seventh as much destitution as does sickness, and one-fifteenth as much as does unemployment. A great deal of unemployment is directly due to sickness, and sickness, in turn, follows unemployment. * * * Other investigations show that 30 to 40 per cent of cases requiring charitable relief are immediately due to sickness.

Sickness among wage-earners is primarily the direct result of poverty, which manifests itself in insufficient diet, bad housing, inadequate clothing, and generally unfavorable surroundings in the home. The surroundings at the place of work and the personal habits of the worker are important but secondary factors.

There are three general groups of disease-causing conditions: (1) Those for which the employer and character of the industry and occupation are responsible; (2) those for which the public, through regulatory and relief agencies, is responsible; and (3) those for which the individual worker and his family are responsible.

The employers' responsibility includes, besides conditions causing so-called occupational diseases, low wages, excessive hours, methods causing nervous strain, and general insanitary conditions.

Many employers already partly recognize their responsibility; aside from "welfare work," many contribute liberally to employees' sick benefit funds or provide for the entire amount.

The public has in part recognized its responsibility in such matters as housing, water supply, foods, drugs, and sanitation. But the recognition of responsibility has not been thoroughgoing, and in the case of local health officers the tendency has been too frequently to provide for the better residential sections and neglect the slums.

The greatest share of responsibility rests upon the individual, and under present conditions he is unable to meet it.

This inability exists by reason of the fact that the majority of wageearners do not receive sufficient wages to provide for proper living conditions, and because the present method of disease prevention and cure are expensive and sickness is most prevalent among those who are least able to purchase health. The worker is expected to provide for almost certain contingencies in the future when he lacks means of existing adequately in the present.

If we might reasonably expect a rapid increase in the wages of all classes of workers to a standard which would permit proper living conditions and adequate medical

attention, it would perhaps be inadvisable to recommend any governmental action. But we feel assured that no such condition is to be expected in the near future, and believe that new methods of dealing with the existing evils must be adopted.

The remedial measures for existing conditions must be based on the cooperative action of those responsible for conditions; must be democratic in maintenance, control and administration; must distribute costs practicably and justly; and must provide a powerful incentive for sickness prevention.

A system of sickness insurance is the most feasible single measure. This conclusion is based on the following:

(*a*) The losses occasioned by the wage-earner's sickness affect employee, employer, and community, all of whom share in the responsibility. Insurance is the recognized method of distributing loss so as to reduce individual risk to a minimum.

(*b*) The strongest incentives—that of lessening cost—is given to efforts to diminish frequency and seriousness of losses; sickness insurance in this respect is a preventive measure of a positive and direct kind. The lower the morbidity and mortality rates, the less the amount necessary for benefits and the lower the insurance rate.

(*c*) Sickness insurance is no longer experimental, but is rapidly becoming universal. It is not a novelty even in the United States. Although not provided for nor subsidized by government here, it is most widely used, there being several million workers so insured.

(*d*) The cost would be no greater than at present. The conclusion appears sound that medical benefits and minimum cash benefits of $7 per week for a period of not exceeding 26 weeks in one year, and death benefits of $200, can be provided at a total cost of 50 cents per week per insured person. Budgetary studies of large numbers of workingmen's families show that under present conditions from 25 and 50 cents a week, up to 70 cents and even $1.86, is spent for little more than burial insurance. Workers would thus receive immeasurably greater benefits for much less than they now pay.

A governmental system of sickness insurance is preferable because—

(*a*) More democratic; the benefits would be regarded as rights, not charity.

(*b*) Compulsory features, obnoxious under private insurance, would be no longer objectionable.

(*c*) On account of the reduction in overhead charges and duplication, higher efficiency in administration would be secured at less cost.

(*d*) Cooperation with other public agencies is impracticable otherwise.

(*e*) European experience has proved the superiority of government systems to private insurance.

(*f*) Taxation of industry by federal government in sickness insurance system is thoroughly established by the Marine Hospital Service. A law taxing vessels for such funds was passed in 1798, and its constitutionality has never been questioned.

The conclusion seems warranted that a sickness insurance system for the United States or the several states, similar in general principles and methods to the best European systems, will be less difficult and radical than has been foreboded. It will not so much introduce new ideas and practices as it will organize existing plans and principles into more effective accomplishment. Existing agencies, in trade unions, mutual benefit societies, and establishment funds, can be utilized just as they have been in Europe. The real problem becomes one of constructive organization.

Several valuable studies have been published by the United States Public Health Service in which primarily the relation between health insurance and public health was emphasized. Literature on the subject contributed by various public officials, large organizations and private students is rapidly growing as a glance at the bibliography will indicate.

General advocacy of the health insurance idea soon developed into definite legislative proposals. The first study of standards of health insurance legislation was published by the committee on social and indus-

trial justice of the Progressive National Service in New York early in 1915. In the fall of 1915 the first tentative draft of a health insurance bill was published by the social insurance committee of the American Association for Labor Legislation, and two later editions with further amplification of the detailed provisions have since appeared.

In the spring of 1916 bills for health insurance were introduced in the legislatures of Massachusetts, New Jersey and New York. The text of the bills was practically identical and was based upon the tentative draft of the American Association for Labor Legislation.

Little but the introduction of the bill was accomplished in New Jersey. But both in Massachusetts and New York hearings on the bill were granted. As a result of these hearings a general demand for further investigation became apparent. A state commission was appointed in Massachusetts, and a bill for a state commission passed the senate in New York, but failed of passage through the assembly because of the adjournment of the legislature.

In the spring of 1913 a commission to investigate old age insurance and pensions and mothers' pensions was created in California by legislative enactment. This commission was handicapped by an insufficient appropriation, and in 1915 a similar law was enacted providing for a Social Insurance Commission. This second commission was given an adequate appropriation, and was required to make a thorough study of the need and practicability of extending social insurance activities in the state of California. This commission has concentrated its efforts upon a study of health insurance.

It is impossible to review all the facts concerning the growth of the social insurance movement in this country without arriving at the conclusions that in the very near future the movement is bound to result in some constructive legislation.

The history of workmen's compensation, in fact the history of any other movement for social legislation, has established the definite stages through which the demand for a social reform must go to become successful.

Academic study of the problem, collection of evidence as to the need of popular propaganda, governmental commissions, preparation of legislative proposals, and finally legislation—these are the normal steps, and in many branches of social insurance several of these steps have already been made. And while the agitation for health insurance is perhaps the most recent of all, the progress made within the short time is also greatest. Outside of California, the states of Massachusetts, New York and Wisconsin show, perhaps, the greatest advance. In these and in many others, bills for health insurance are expected to be introduced during the next legislative session.

SECTION IV.

ENDORSEMENTS OF HEALTH INSURANCE BY LABOR ORGANIZATIONS.

Though the movement for health insurance is very recent, a large number of labor organizations have already gone on record as endorsing it. This is especially noteworthy since the early attitude of many labor organizations was that of mistrust, if not antagonism, largely because of fear of the compulsory principle.

Labor organizations endorsing health insurance.

A. State Federations—

New Jersey State Federation of Labor.
Wisconsin State Federation of Labor.
Massachusetts State Federation of Labor.
Missouri State Federation of Labor.
Ohio State Federation of Labor.

B. International Unions—

International Typographical Union.
International Glove Workers of America.
International Union of Steam and Operating Engineers.
International Spinners' Union.
International Brotherhood of Pulp, Sulphite and Paper Mills Workers.
International Ladies' Garment Workers' Union.
Amalgamated Clothing Workers of America. (General Executive Board.)
United Textile Workers of America.

The following are illustrations of the general type of resolution passed by these numerous labor organizations:

RESOLUTION.

Passed by International Union of Steam and Operating Engineers.

WHEREAS, Careful estimates by the United States Public Health Service shows that $180,000,000 is the annual cost of medical treatment to the American wage earners and their annual wage loss due to sickness is over $500,000,000 more, and

WHEREAS, The findings of the Department of Labor, the Public Health Service, the Federal Commission on Industrial Relations indicate that the best method of protecting the workers against their suffering and losses due to sickness is a governmental system of universal health insurance, and

WHEREAS, European experience, as well as our own experience in workingmen's compensation laws, has demonstrated that workingmen's insurance tends to prevent sickness and accidents, be it therefore

Resolved, By the International Union of Steam and Operating Engineers in convention assembled, that the convention favors a universal system of health insurance,

with contributions by employers and the state as well as by the workers, in order that efficient and economic medical service may be furnished to employees and proper emphasis may be placed upon the prevention of industrial disease.

RESOLUTION.

As Passed by the International Brotherhood of Pulp, Sulphite and Paper Mill Workers. (Membership between 15,000 and 20,000.)

WHEREAS, The introduction of workmen's compensation laws has greatly ameliorated the economic loss and suffering previously endured by wage earners because of accidents, and

WHEREAS, The findings of the United States Public Health Service and the Federal Commission on Industrial Relations indicate that the suffering and economic loss endured by wage earners on account of sickness is seven times that endured on account of accidents, and

WHEREAS, European experience proves that workmen's health insurance is the best method of protecting the workers against the contingencies of sickness and industrial disease and of prolonging their lives; therefore be it

Resolved, By the International Brotherhood of Pulp, Sulphite and Paper Mill Workers of the United States and Canada in convention assembled that the convention favors a universal contributory health insurance law which would exclude profit-seeking insurance companies and which would insure to all sick wage earners prompt and efficient medical aid, as well as financial assistance.

RESOLUTION.

Adopted October 12, 1916, by the Ohio State Federation of Labor.

WHEREAS, Investigations recently conducted by the Ohio State Board of Health, the United States Public Health Service, the Department of Labor, and the Federal Commission on Industrial Relations show that the American wage earners endure annually enormous suffering and economic loss on account of sickness, and

WHEREAS, The amount of suffering and economic loss endured by workingmen and women because of sickness is seven times that endured by them because of accidents, and

WHEREAS, European experience demonstrates that workingmen's insurance results in the prevention of sickness and in the lengthening of the lives of the workers, therefore be it

Resolved, By the Ohio State Federation of Labor, that the Federation favors a universal system of health insurance, without opportunity for insurance company profits, and in order that prompt and efficient medical service may be furnished to sick wage earners and due emphasis placed upon the prevention of sickness and industrial disease.

SECTION V.

OLD AGE INSURANCE AND PENSIONS.

It is impossible to point to any legislative step in this country comparable to European and Australian legislation dealing with the problem of old age destitution, unless it be the system of war pensions which has existed in this country for many years and has achieved its highest development since the Civil war. It is true that these pensions are given in consideration of past services in military operations. As is stated by one writer:

> "It is childish to consider the system of war pensions as a sentimental problem only, and to speak of the millions spent for war pensions as the cost of the Civil war. We are clearly dealing here with an economic measure which aims to solve the problem of dependent old age and widowhood."*

The same writer points out that because of the rapid dying out of the veterans "a large appropriation will automatically become available, which will permit of the establishment of a national old age pension scheme without national fiscal disturbance—something which no important European country has been able to accomplish."

One of the most disputed problems in the field of social insurance in Europe has been the problem of comparative advantages of compulsory insurance versus old age pensions in dealing with the problem of old age.

It is argued in favor of the pension method that it has the advantage of simplicity in avoiding the numerous complications of a system of compulsory insurance, that it offers an immediate solution of the problem, while the advantages of compulsory insurance can be realized only after a considerable period of time, since insurance for purposes of acquiring an annuity is very expensive unless begun at an early age; that the pension system avoids the method of compulsory contributions; that it prevents the unnecessary accumulation of enormous reserves, thus unnecessarily withdrawing capital from productive enterprises.

On the other hand, objections raised against the pension method are: that it is a modified or disguised form of charitable relief; that since it requires evidence of destitution, it encourages improvidency; that it results in discrimination against those who endeavor to make some provision against old age; that it places a heavy financial burden upon the public treasury; and finally, that as it must offer one uniform amount to all aged persons, the amount must be a very small one.

The controversy has already been raised in this country, and probably

*I. M. Rubinow, Social Insurance, p. 404.

will be an additional obstacle to constructive legislation. But it is significant that proposals in both directions are already being made and that the question of old age dependency, and of the necessity of some definite social policy in dealing with this condition have been placed before American public opinion.

Several states have had legislative investigations. In Massachusetts more than in any state has this problem received consideration. As far back as June 26, 1907, the first Commission on Old Age Pensions, Annuities and Insurance was established which rendered a comprehensive report in January, 1910, and though the commission rendered a report adverse to the immediate establishment of an old age pension system, the importance of the social problem of old age was clearly recognized.

The general conclusions of the commission may be summarized in the following quotations:

> "Serious practical difficulties stand in the way of the establishment of any general system of old age pensions by this commonwealth or any single state.
>
> "The commission holds that it would be inexpedient for Massachusetts or any state to adopt a general system of old age pensions, either at the present or at any time in the future.
>
> "It seems desirable that the problem of sickness and accident insurance should be dealt with before enacting any additional measures of general legislation concerning old age pensions or insurance. Logically, the problem of sickness and accident insurance takes precedence over the question of old age insurance.
>
> "There is no considerable demand in this state for the establishment of a general scheme of old age pensions and insurance."
>
> "We also commend to the consideration of corporations of a permanent character with a large staff of employees, especially public service corporations in the cities, the schemes of old age insurance and pensions which have been instituted by various large concerns.
>
> "We would furthermore direct attention to the new opportunities for old age insurance offered by industrial insurance companies. This insurance has been greatly cheapened and improved during the last year.
>
> "We suggest that in due time the laws governing the operation of fraternal beneficiary corporations be amended so as to enable these societies to pay old age benefits under supervision by the State Insurance Commissioner as regards rates of assessment and method of administration.
>
> "We recommend the enactment of measures providing for the establishment of retirement systems for public employees.
>
> "We advise the general court to pass an act providing for the establishment of a permanent unpaid commission on old age pensions and insurance. We believe this subject to be of sufficient importance to justify the creation of a special department, to deal with it in comprehensive and systematic fashion. The function of such a commission definitely stated would be to act as a bureau of

information and assistance for employers and employees, municipalities and counties, with a view to aiding and advising them regarding the establishment of retirement systems; to study the operation of schemes of old age insurance, annuities and pensions in other states and countries, and the proposals for new legislation on this subject, and to keep the legislature and the public informed concerning these matters."

The first Massachusetts report admittedly left the question open. Early in 1913 a bill for the systems of old age pensions was introduced in the lower house, and a hearing was held. Partly as a result of this hearing a second commission on pensions was created by a resolution approved by the Governor on January 4, 1913. Its official designation was: "Commission to advise a just and comprehensive system of state, county and municipal pensions." But broader powers were conferred upon it in the following sentence of the resolution:

"The commission shall also consider the case of persons now receiving pensions who are engaged in other employment and shall also report upon the advisability of a general pension system for old age or other disability, and may report a plan or plans for such a system."

But even the second report has not disposed of the matter in Massachusetts where several social insurance bills were introduced in the legislative session of 1916. A third commission was appointed to consider old age pensions or insurance as well as other branches of social insurance.

New Jersey.

A resolution was passed by the legislature of the state of New Jersey and approved by the Governor on March 23, 1910, for a commission to thoroughly investigate and report to the Governor the draft of a bill providing for industrial old age pensions, for consideration and action by the members of the One Hundred and Thirty-fifth General Assembly.

Wisconsin.

A resolution was passed by the legislature and approved May 7, 1913, directing the Industrial Commission of the state to investigate the subject of old age pensions, to make a thorough and complete investigation of the number, conditions and welfare of aged infirm, with a view of establishing a system of old age pensions.

In compliance with this resolution a brief report was submitted by the Industrial Commission of Wisconsin in 1915, which declared:

"That Wisconsin will have sooner or later to face the question of old age relief can scarcely be doubted by anyone who is familiar with the trend of events in modern industrial communities. That the question is easier of solution now than it will be a generation hence is still less open to doubt. But the need is not so urgent as to justify hasty legislation. A new system of old age relief ought

not to be adopted without mature consideration and the full support of public opinion. The commission does not wish, therefore, to recommend any specific measure at this time."

United States.

The movement for old age pensions has already resulted in some agitation before the United States Congress. As early as December 14, 1909, Congressman Wilson of Pennsylvania (now Secretary of Labor) introduced an act to organize an Army Corps, prescribe qualifications for enlistment therein, define the duties and fix the compensation and term of enlistment of privates, which was, notwithstanding its official title, really a plan for an old age pension system. The bill did not pass.

SECTION VI.

UNEMPLOYMENT INSURANCE.

Discussion of measures to prevent or minimize unemployment, or at least mitigate the distress caused by it, has followed every acute economic crisis and every period of prolonged industrial depression, but only very recently has unemployment insurance been put forth as one of the possible remedies. The reasons for this are not difficult to understand. Though ways and means for unemployment insurance have been discussed in Europe for 15 or 20 years, the results accomplished prior to 1911 were rather limited. In so far as experiments were successful they took the form of substantial subsidies to trade union funds, or other funds organized by wageworkers. Compulsory unemployment insurance was even thought an economic impossibility until the British National Insurance act supplied evidence to the contrary. But the admitted prerequisite to such a system—an efficient system of public employment exchanges—was also lacking.

The first important official investigation of conditions of unemployment, irrespective of crises and depressions, was that of the "New York State Commission on Employers' Liability and Other Matters," appointed in 1909, which largely devoted its labor to questions of employers' liability, compensations and prevention of industrial accidents, but appointed a subcommittee on unemployment, which brought in a very exhaustive report. The investigations of the committee in Europe were limited to Great Britain and Germany, while the most successful experiments in unemployment insurance had been accomplished in Belgium, Denmark and Norway. The conclusion of the commission as to unemployment insurance in Germany was therefore not enthusiastic. It was:

> "Two important experiments have been made in Germany with public insurance against unemployment. Neither of them can be said to have proven successful, but they have pointed out what might be done for certain classes of unemployed."

No reference to the insurance method was made in the recommendations of the commission. On December 29, 1911, the first general meeting of the American Association for Labor Legislation devoted to the problem of unemployment took place, and the American section of the International Unemployment Association (L'Association Internationale pour la Lutte Contre Le Chomage, organized in 1910, with headquarters in Paris) was organized. Even at this meeting, Prof. C. R. Henderson stated that "it is to the trade unions that we must first look for the most

promising developments in the direction of insurance against unemployment, later we may hope for legislation."

The intelligent study of the problem of unemployment in this country dates from the organization of this association. In 1912 municipal committees on unemployment were organized in Chicago and Milwaukee. On June 6–7 the First American Conference on Social Insurance was held in Chicago and a paper on "Insurance Against Unemployment" was presented by the late Prof. Charles R. Henderson, who said:

> "The conclusions are that for a people which profess to be civilized, unemployment insurance has become a necessity. It is not a physical but a moral necessity. We can not retain our ethical standards and refuse to face our task."

With the English precedent already available at the time, Prof. Henderson asked: "Would it not be more fair, more full of promise of results within a reasonable time for all those who realize the monstrous injustice of our present neglect to unite on a policy resembling in the main principle the British system?"

The very serious industrial depression of the winter 1913–14 which continued during the first winter after the beginning of the war, focused the attention of the American people upon the problem of unemployment as never before. In many states and municipalities unemployment commissions were appointed. A National Conference on Unemployment with representatives from 59 cities and 25 states was held under the auspices of the American Association for Labor Legislation in New York City on February 27–28, 1914, and a second conference in Philadelphia December 28–29, 1914.

The significant fact is the increasing frequency with which unemployment insurance was suggested at least as one of the possible remedies in the effort to retrieve the effects of unemployment. In the following extracts from some of the reports is shown an illustration of this tendency.

California.

The permanent Commission of Immigration and Housing of the state of California was asked by Governor Hiram W. Johnson on January 28, 1914, to direct its attention to the problem of unemployment, with the object of suggesting what remedy might be applied by the state. The report rendered to the Governor on December 9, 1914, contained the following recommendations with regard to unemployment insurance:

> "For the worker in seasonal trades, and in fact for all who labor for a wage, we suggest unemployment insurance, though we are not prepared to recommend any particular form. The success of this state in handling industrial accident insurance is one argument that warrants our looking more deeply into the whole field of social insurance. We urge that Your Excellency designate some existing board

or commission to investigate this subject thoroughly, to report, say in two years. Data supplied by the proposed bureau of labor exchanges would be of inestimable value in any such investigation. We recommend to your attention the experience of England and certain continental countries, particularly Denmark and Belgium, which has invented the Ghent system of subsidizing labor unions to conduct the machinery for unemployment insurance."

The mayor of the city of Chicago, under authorization of the city council on January 22, 1912, appointed a committee headed by Charles R. Crane to inquire into and report concerning the cause or causes of the nonemployment of so many wage earners, the extent and effect of the prevailing conditions upon the community, and what can and should be done more effectually to relieve the suffering of the poor and unemployed and provide employment.

In the first preliminary report of the commission few recommendations were made by the commission as a whole, but the subcommittee on relief recommended:

"1. The establishment of a state insurance against unemployment based on the Ghent system.

2. That the Governor and legislature be requested at the next session of the legislature to pass laws providing for such a system."

On August 24, 1914, or a few weeks after the beginning of the European war, when the unemployment situation became seriously aggravated, the city council of Chicago passed a resolution ordering the Chicago Municipal Market Commission to "prepare as soon as possible a practical plan for relieving destitution and unemployment resulting from war conditions." In its report rendered on December 28, 1914, a very decisive stand in favor of unemployment insurance was taken in the following language:

"While the establishment of a municipal employment bureau for part-time work, and public works for the unemployed, will do much towards solving the problem of unemployment, there are, however, periods of severe business depression and cyclical fluctuation in industry where these methods of combating unemployment are to a certain extent practically ineffective. There will still remain an excess of wage earners for whom no part or short-time work is available, and the municipal employment bureau will bring no relief, inasmuch as jobs and work are scarce and at a premium. In order to reach this excess group of wage earners and protect it against the distress and misery incident to prolonged unemployment, it is advisable that the community establish some form of public insurance against unemployment. * * *

"It should, however, be urged that the prime requisite to the establishment of insurance for the unemployed is a municipal employment bureau. This has been called a point of fundamental importance, inasmuch as no scheme for the insurance of the unemployed can be a success unless founded upon the adequate and

efficient control of the labor market by a complete registration of all the unemployed existing in the community.

"The municipal employment bureau should be the guardian and watchdog over the fund providing for public insurance of the unemployed. No wage earner should be eligible to unemployment insurance unless he is registered at the employment bureau, nor be able to, as is the case in German cities, draw a penny from such fund one moment after the municipal employment bureau is assured that there is work available for him to do.

"Insurance against unemployment has well been termed the second line of action on the problem of unemployment after the establishment of a municipal employment bureau. The municipal employment bureau, which is the first line of action, flanked by a system of part or short-time work and public works for the unemployed, should receive the undivided attention of our public officials before any schemes for the establishment of public employment insurance are elaborated. The first line of action, it should be said, will require years of steady effort and perseverance before any considerable inroads can be said to have been made upon the problem of the unemployed."

Massachusetts.

Massachusetts is the only state in which the movement for unemployment insurance has reached the stage of legislative proposals. The economic depression of the winter of 1913 caused the creation of the Massachusetts Committee on Unemployment.

The committee soon arrived at the conclusion that until very substantial changes were introduced in the organization of the labor market, unemployment would remain a feature of industrial life; and that as preference to methods of charitable relief a system of unemployment insurance should be elaborated. A bill was introduced in the legislative session of 1916, and a hearing was held on this as well as other social insurance bills, as a result of which the present Massachusetts commission was appointed.

The Massachusetts bill was drawn on lines similar to the British system, providing for compulsory insurance within specified trades, the scope, however, being wider, and included the following industries: building and construction, textiles, leather, rubber, tobacco, clothing, paper, printing and publishing, quarries, machinery and metal products, vehicles, teaming and trucking. The system provided a state insurance fund, with contributions equally divided between employer, employees and the state. Benefits were provided for in three groups, $3.50, $5.25 and $7.00 a week, according to whether the workmen's ordinary earnings were $8.00 or less, over $8.00 but under $12.00, and $12.00 or over. There was to be no benefit for the first week, and the maximum duration of benefits was placed at ten weeks during any one year.

New York.

In the fall of 1914, when the city of New York was entering the second year of serious unemployment conditions a committee on unemployment and relief was appointed by the mayor, with Judge E. H. Gary as chairman. It recommended earnest consideration of the subject.

United States.

During 1916 the question of unemployment insurance received considerable attention from the United States Congress. On February 19, 1916, a joint resolution was introduced in the House of Representatives by Congressman London of New York, for the appointment of a commission to prepare and recommend a plan for the establishment of a national insurance fund and for the mitigation of the evil of unemployment. Though, as appears from the text of the resolution, the purposes of the commission are broader than the specific problem of unemployment, and cover "A national system of social insurance which is to secure to the worker adequate means of subsistence while involuntarily unemployed, whether the unemployment be caused by lack of work, by sickness or old age," the problem of lack of unemployment was emphasized. Two hearings were granted by the Committee on Labor on this resolution,* and the resolution was reported favorably to the house, though no further action had been taken by the end of 1916.

It is impossible to overlook the significance of the fact that in various parts of the country the investigations of the unemployment problem called forth by the industrial depression of 1913–14 have led to the recognition of unemployment insurance as a possible measure for mitigating the results of unemployment. Public discussion of methods for prevention and relief of unemployment invariably arose during past industrial depressions, but never before was unemployment insurance even suggested, and more significant is the fact that agitation for unemployment insurance has not subsided with the sudden change in the labor market in the spring of 1915. Public opinion seems to have learned the lesson that the time to prepare for the ravages of unemployment is during the time of normal conditions.

Present indications are that the agitation for some form of unemployment insurance will continue to grow until a practical plan to suit American conditions is achieved. There are, however, serious practical difficulties which must be overcome. First is the lack of familiarity with the methods of social insurance in general, and second the absence in most states of an efficient system of public employment offices. It appears doubtful whether unemployment insurance will be successfully realized until simpler forms of social insurance, primarily health insurance, have been enacted.

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*U. S. House of Representatives, 64th Congress, 1st Session Committee of Labor. Hearings on H. J. Res. 159, April 6 and 11, 1916.

SECTION VII.

MOTHERS' PENSIONS AND ORPHANS' AID.

While differences may persist as to the comparative advantages of the contributory insurance method and the gratuitous pension method in dealing with the problem of orphanage, a place to the mothers' pension laws in the field of social insurance legislation can not be denied.

Outside of compensation for industrial accidents and occupational diseases, mothers' pensions are the only branch of social insurance legislation in which substantial progress has been made in this country. Protection for mothers and orphans is the least developed branch of social insurance in Europe. Germany is practically the only country which has provided a system of general contributory insurance for this purpose, while Denmark has followed the American method of non-contributing pensions.

It is customary in almost all writings on mothers' pensions to point to the so-called White House Conference in the case of dependent children, called together in January, 1909, by President Taft, as the beginning of the movement for granting pensions to widows with children, or mothers of children dependent for other reasons than death of the father. As a matter of historical fact, precedents for such a public policy antedate the conference of 1909 by several years.

It is interesting to observe that California was the first state to inaugurate such a system. The constitution of the state and also the statutes of 1880 and 1883 (codified in 1907) authorized the granting of payments by the state to the counties for dependent children committed to private institutions. After the San Francisco earthquake the policy of recommitting children in the care of the dependent but otherwise competent mothers was tried. The general practice of leaving dependent children in the custody of their mothers instead of committing them to institutions, and paying to the mothers an amount approximating what the support of the children would cost was inaugurated after amendatory legislation in 1913.

The rapid success of this agitation is one of the amazing things in the history of social legislation. Comparisons with the spread of workmen's compensation suggest themselves, because both movements proceeded almost simultaneously. While the speed of the growth of compensation was great, mothers' pensions spread very much faster. The first state to legislate was Missouri, by a special act limited to Kansas City, approved April 7, 1911. A state-wide act was passed in Illinois on June 5, 1911. The year 1912 being one in which comparatively few

legislators met, only one or two states were added. But in 1913, of the 42 state legislatures in session, 27 had before them bills providing for the support of dependent children in their own homes, out of public funds, and 17 of these passed such acts.

In contrast with compensation, only a few states considered the necessity of appointing commissions for the careful study of the problems. Massachusetts appointed such a commission in 1912, New York and California in 1913.

There were 22 state mothers' pensions laws in force in 1914, and in 1916 probably 25.

In a few states where legislation was preceded by investigating commissions, a certain amount of opposition to mothers' pensions developed among students who advanced social insurance as the alternative.

Historically, the situation is that Denmark is the only European country in which systematic provision is made for orphans by means of mothers' pensions, and Denmark does not stand in the advance guard of the social insurance movement. On the other hand, Germany is the only country in which systematic provision is made for very small pensions for widows and orphans, partially paid for by contributions from the wage earners during their working lives. Even with Germany's 20 to 30 years' experience with social insurance, the problem of the surviving children is still largely unsolved.

It is undoubtedly true that the pension system offers a quicker way of meeting an existing problem. It is, however, unnecessary to assume that the method of the gratuitous pensions once adopted must be accepted as the final solution of the problem. While it may remain the only solution in certain cases of destitution, the possibilities of systematic life insurance through a compulsory contributory method at least for persons of the wage and salary earning group is still open and is being advocated by many.

SECTION VIII.

COMMITTEES ON SOCIAL INSURANCE.

A significant feature of the present social insurance movement in the United States is the organization of a large number of voluntary committees, some national, others local, for the study of social insurance. Most of these committees are centering their attention on compulsory health insurance.

The commission has endeavored to get in touch with all such committees and to obtain some information concerning their plans and activities. A very large number of local committees have been established by county medical societies in California, by state and county medical societies in other states, and by numerous local organizations of social workers. The list, though incomplete, gives an indication of the interest at present displayed by intelligent public opinion throughout the country in social insurance.

Actuarial Society of America.

An informal committee on social insurance, with Mr. Arthur Hunter, actuary of the New York Life Insurance Company and president of the society, as chairman.

The presidential address of Mr. Hunter at the October, 1916, meeting of the society, was devoted to the subject of social insurance, and concluded as follows:

> "Since the founding of our society we have seen two phases of business, the competitive and the cooperative, and have been individually influenced by them. The former was an era of individualism, and the latter will develop, we hope, into one of mutual helpfulness. Let us then be true to our social selves and heartily aid with our trained knowledge all efforts by legislatures and other bodies to raise the standard of universal welfare. The opportunity to help in one phase, the preparation of a health insurance bill, is now upon us, and it is the duty of American actuaries, whether connected with this or sister societies, to offer their services freely for the public benefit; otherwise, men who have not had the requisite training will be consulted and doubtful advice may be followed."

American Academy of Medicine.

F. Van Sickle, M.D., Olyphant, Pennsylvania, chairman.

This committee is preparing a report to be presented to the annual meeting of the Academy, in June, 1917, with special reference to health insurance.

Dr. G. A. Hare of Fresno, California, president of the Academy, in his presidential address at the forty-first annual meeting of the

American Academy of Medicine, held in Detroit, Michigan, on June 9, 1916, said:

> "There is no greater service the Academy can render to both the medical profession and to society than a constructive solution of the present question of social insurance. The rapid development of these questions constitutes one of those great tidal waves of society against which opposition is futile."

American Association of Industrial Physicians and Surgeons.

Committee on social insurance (Dr. H. C. Moch, Chicago, Illinois, secretary), organized at the first annual meeting of the association held in Detroit, Michigan, in June, 1916, for the study of social insurance.

American Association for Labor Legislation.

Professor Edward T. Divine, Columbia University, New York City, chairman.

Miles M. Dawson, consulting actuary, New York City.

Professor Carroll W. Doten, Massachusetts Institute of Technology, Boston, Mass.

Dr. S. S. Goldwater, formerly health commissioner, New York City.

Dr. Henry J. Harris, chief division of documents, Library of Congress, Washington, D. C.

Professor Alexander Lambert, Cornell University, Medical School, New York City.

Dr. I. M. Rubinow, secretary social insurance committee, American Medical Association, New York City.

Professor Henry R. Seager, Columbia University, New York City, economist.

Miss Lillian V. Wald, head resident, Henry Street Settlement, New York City.

Dr. John B. Andrews, secretary of Association and of the committee, New York City.

This is perhaps the most important committee on social insurance. It was organized in December, 1912, and has devoted most of its time to the study of health insurance. It held the First National Conference on Social Insurance in Chicago, in May, 1913; it published in November, 1915, "Standards and Tentative Draft of a Health Insurance Act"; it produced health insurance bills in the legislatures of Massachusetts, New Jersey and New York, in 1916, and is at present in touch with a health insurance movement in some 20 states.

American Institute of Homeopathy.

Committee on social insurance, Dr. H. Cole, New York City, chairman.

Under date of October 17th, Dr. Cole writes the committee as follows:

> "The American Institute of Homeopathy went on record at its last annual meeting in favor of health insurance. The purpose of

our committee is to cooperate with the American Association for Labor Legislation in procuring the enactment of health insurance laws, such laws to be framed to reasonably conserve the interests of physicians in general and the members of our organization in particular."

American Medical Association.

Social insurance committee, Dr. A. Lambert, New York City, chairman.

The purposes of the committee are stated in the following quotations from the report made to the annual meeting of the Association in June, 1916.

"At a meeting on February 9, 1916, the board of trustees confirmed the appointment of this committee by the adoption of the following resolution:

" 'That the committee appointed jointly by the council on health and public instruction and the judicial council, consisting of Drs. Alexander Lambert, Frederick J. Cotton and H. B. Favill, be approved, and that the purpose and duties of this committee be understood to be the careful compilation of information, *in re* social or health insurance and the relations of physicians thereto; and to do everything in their power to secure such constructions of the proposed laws as will work the most harmonious adjustment of the new sociological relations between physicians and laymen which will necessarily result therefrom, and that this committee be authorized to carry on its work wherever seems most desirable.' "

"In the near future it is the intention of the committee to undertake the following duties:

First. To educate the American medical profession in the general principles of social insurance, particularly health insurance, the economic and social significance of the movement to obtain such insurance throughout the United States, and the absolutely essential part which the medical profession must play in a successful adaptation of this new legislation to American conditions.

Second. The bureau will consider it as part of its work to answer all questions which any physician may desire to write to it, asking for information, facts or figures bearing on social insurance in any of its phases, and to be in reality a bureau of information for the medical profession in regard to the details of organization of medical aid in various forms of social insurance, both in European countries and the United States.

Third. The committee considers it its duty to appear when advisable before the legislative bodies in this country with a view to bring about friendly understanding between all parties concerned and to protect the legitimate economic interests of the profession in the laws coming up for discussion concerning social insurance.

The work of this committee should be directed in such channels as to avoid the conflict which has arisen in England at the beginning of a similar movement and which has resulted in a very large amount of bitterness between the profession and the public that might easily have been prevented by appropriate timely action.

It is further the intention of the committee to undertake the following lines of work without assuming the obligation of completing them within any specified time:

First. To collect a bibliography on social insurance with special reference to medical questions involved.

Second. To undertake, by correspondence, to get in touch with the various sickness insurance organizations in Europe, so as to obtain first-hand information as to their experience.

Third. To undertake a statistical study of hospital and dispensary facilities in this country in view of the possibility of these institutions assuming a broader function under health insurance.

Fourth. To study the conditions of lodge practice both from the point of view of the physician and the patient.

Fifth. To gather all available information regarding the status, earnings, etc., of the medical profession in regard to which problem the wildest statements are current without any basis of fact underlying them."

This committee began a series of publications, of which five have appeared up to date, and may be obtained from the Association, 535 North Dearborn street, Chicago, Illinois, or from the Social Insurance Committee, 131 East Twenty-third street, New York City.

1. Workmen's Compensation Laws, Report of 1915.
2. Social Insurance, Report of 1916.
3. Health Insurance in Relation to Public Dispensaries.
4. Health Insurance in Relation to Public Health.
5. Social Insurance (two lectures).

Further issues will be devoted to statistics of the medical profession in the United States, public dispensaries in New York City, etc.

American Nurses' Association.

Committee on health insurance, Miss Martha M. Russell, New York City, chairman.

Miss Russell writes the commission as follows:

"The committee of the American Nurses' Association was appointed with the idea of cooperating with any legislation for health insurance in such a way that the nurses would be able to work for a class of people for whom they have been able to do very little, and that the people insured should receive the best nursing care possible."

Brooklyn Civic Club.

Committee on social welfare, Theodore F. Monench, secretary.

This is a standing committee which recently has been devoting a great deal of its time to social insurance.

Under date of October 25, 1916, Mr. Monench wrote this commission as follows:

"Last year the committee on social welfare made a very careful investigation of the question of health insurance legislation. * * * The committee went on record as favoring in principle the question

of health insurance. The committee also favored the passage of the various workmen's compensation bills before the New York state legislature."

California Commonwealth Club of San Francisco.

Section of social insurance, Mr. A. Salz, chairman.

This committee has been making a very careful study of the theory and practice of health insurance since the creation of the Social Insurance Commission of California.

California State Medical Society.

Committee on social insurance, Dr. Rene Bine, San Francisco, chairman.

This committee has been appointed to study health insurance from the point of view of the medical profession and to cooperate with the State Social Insurance Commission. Similar committees were appointed in the various county medical societies of the state.

International Association of Industrial Accident Boards and Commissions

Committee on social insurance, Honorable Royal Meeker, United States commissioner of labor statistics, Washington, D. C., chairman.

This is a semi-official organization in which are represented industrial accident boards and commissions of various states, created to administer compensation laws.

This association held a national conference on social insurance under the auspices of the United States Department of Labor, in Washington, December 5 to 9, 1916.

National Convention of Insurance Commissioners.

Committee on social insurance, Honorable Rufus N. Potts, insurance superintendent, Springfield, Illinois, chairman.

This committee was created in 1915, and has prepared a very comprehensive report on social insurance, parts of which have been printed as an appendix to hearings on social insurance before the Committee on Labor of the United States House of Representatives.

The report of this committee has not been acted upon. At the national convention held September 28, 1916, Mr. Potts read a paper on "Welfare (Social) Insurance."

Mr. Potts has been advocating a change of the term "Social Insurance" to "Welfare Insurance," because:

> "It is for the general public's erroneous association with the name of a political party called Socialists. The effect of the name 'Social Insurance' tending to produce a hostile attitude in the minds of members of other political parties, the same as if it were called Republican, Progressive, Democratic or Prohibition insurance."

In this paper Mr. Potts states as follows:

> "A universal system of compulsory welfare insurance carried on by the people themselves through their government would furnish an equable and financially practical system which would at

the same time prevent suffering from unavoidable misfortune and preserve the inestimable benefits of our present industrial and social system.

"Compulsion is now used to enforce education, sanitation, fire prevention, food supervision, traffic regulation, and in fact, obedience to all laws. Sentimental objections to the absolutely necessary compulsory feature should not be allowed to prevent the inestimable benefits of universal welfare insurance."

Associated Out-Patient Clinics of the City of New York.

Committee on health insurance, Dr. E. H. Lewinski-Corwin, secretary.

"The health insurance committee is endeavoring to cooperate with similar committees of the American Medical Association in gathering facts concerning the prevalence of sickness in this city, to formulate plans of medical and dispensary organization under a system of state health insurance, and to standardize certain conditions bearing on the situation." (Letter from Dr. Corwin dated November 20, 1916.)

American Electric Railway Association.

Committee on public relations, James D. Mortimer, chairman.

This committee presented to the annual convention held at Atlanta, Ga., October 9 to 13, 1916, a comprehensive report of 112 pages on social relations. Of this report over one-half is devoted to the matter of social insurance, specifically, life insurance, health insurance and workmen's compensation.

In discussing health insurance it arrived at the following conclusions:

"The benefits of health insurance can only be made widespread by making insurance compulsory. While quite generally appreciated by workingmen having dependents and more generally sought after than life or funeral insurance, there yet remain a substantial number who hesitate to enter into a health insurance contract on account of its cost. Many feel that a modest policy, paying benefits such as $1.00 per day, accompanied by medical benefits, is sufficient for their ends. This is partly true where the workingman has enjoyed fair wages and through the practice of thrift has accumulated a reserve fund of his own. It is in the stratum of workingmen where the wage is low that the financial benefits of health insurance find their greatest use. Medical benefits are required by all classes.

"Compulsory insurance can be best introduced by the employer making a substantial contribution toward the cost of insurance, considering such contribution as a part of the wage payment and an element in the cost of production.

"Just as the compensation of the machine which has outworn its usefulness is chargeable to the productive process, so it is now considered that the cost of industrial accidents to employees is properly borne by the industry. A somewhat similar philosophy underlies the demand for health insurance legislation now being concurrently urged in several states of the Union.

"A middle course theory reconciles this recent tendency as not out of accord with the ideals of individualism. It recognizes accidents, sickness and death as capital hazards confronting each individual. Adequate provision for them by the individual is frequently impossible, even with great sacrifice and foresight. Until such provision is made, there exists a lack of security which interferes with the best productive effort and the greatest happiness of the individual. Yet, by cooperative action, the cost of such capital hazards may be shared and borne with slight difficulty. This assists rather than interferes with the maximum individual progress."

National Conference on Charities and Corrections.

Committee on social insurance, Mr. Max Senior, Cincinnati, Ohio, chairman.

This committee was first created at the conference of 1916. The committee on social insurance is preparing a comprehensive program on social insurance in general and particularly on health insurance for the meeting to be held in May, 1917, at Pittsburg, Pennsylvania.

Wisconsin Anti-Tuberculosis Association.

Committee on health insurance, Mr. Geo. G. Goetz, Milwaukee, Wisconsin, chairman.

"We have taken up the study of this subject very recently. During this time we have endeavored to cooperate with the committee on health insurance of the Wisconsin State Medical Association, and to assist them in the compilation of their report which was read at the meeting of the State Medical Society on October 3d. The committee on health insurance of the State Medical Society has been reappointed and the State Medical Society has gone on record as favoring the principle of health insurance. We shall continue to cooperate with them in endeavoring to work out the medical features of the proposed bill. We intend to obtain all the information possible as to what is being done in the line of voluntary social insurance in this state at the present time, both by employees and employers, and plan to further cooperate with the various organizations, notably labor and civic associations, but more especially with the Industrial Commission of Wisconsin, which, we were informed, is to be asked to report to the coming session of the legislature concerning various phases of this legislation. We thus hope to be of assistance in helping arrive at a workable bill for Wisconsin." (Letter from Mr. Goetz dated October 16, 1916.)

International Association of Casualty and Surety Underwriters.

Committee on social insurance, Mr. Wm. Brosmith, counsel, Travelers' Insurance Company, Hartford, Connecticut, chairman.

"The committee of the International Association of Casualty and Surety Underwriters, of which I happen to be chairman, has been studying the various proposals for social or welfare insurance, and

SECTION IX.

ATTITUDE OF AMERICAN STUDENTS TOWARD SOCIAL INSURANCE.

In order to ascertain the present attitude of American economists and students of social problems to the subject of social insurance, the commission sent out an inquiry blank to some 3,256 persons, members of the American Economic Association and the National Conference of Charities and Correction. The first list consists largely of teachers of economics and like subjects in American universities with a certain proportion of men in business activities familiar with economic problems. The second list consists partly of professional social workers and partly of persons in other walks of life who are interested in social work and social problems. These lists are regarded as representative of the particular group whose opinions were desired. Altogether 675 replies were received.

In answer to the question, "Are you in favor of a policy of social insurance in the United States?" their replies were as follows:

1. In favor of social insurance	587	86.96	per cent
2. Opposed to social insurance	27	4	per cent
3. Not sufficiently acquainted with the subject to give a definite answer	61	9.04	per cent
Total replies	675	100	per cent

It is significant, therefore, that an overwhelming majority were in favor of a social insurance policy, an attitude very much different from that which would have been disclosed if a similar inquiry were made ten years ago.

As the question of compulsory versus voluntary insurance is perhaps one of the most controversial ones, replies to the question, "Are you in favor of compulsory or voluntary insurance?" are significant. Taking the 587 replies favoring some system of social insurance, they are divided as follows:

1. In favor of compulsory insurance	450	76.66	per cent
2. In favor of voluntary insurance	108	18.40	per cent
3. Preference not stated	29	4.94	per cent

The correspondents were requested to indicate the order of importance in which the various branches of social insurance called for immediate action. Four branches of social insurance were specified: sickness or health insurance; unemployment insurance; old age insurance; and survivors' insurance, by which was meant insurance of pensions to widows and orphans surviving after death of the wageworker,

In a fairly large proportion of cases the blanks failed to contain the answers to this question or parts of the question, but taking the total number, 587, who have gone on record as favoring social insurance in general, sickness insurance was indicated as—

First choice	270 cases	or 46	per cent
Second choice	117 cases	or 19.93	per cent
Third choice	57 cases	or 9.71	per cent
Fourth choice	9 cases	or 1.53	per cent
Choice not specified	133 cases	or 22.66	per cent

Thus in two-thirds of the replies, sickness or health insurance, was selected as the first or second choice.

Old age insurance, on the whole, was the second choice in the opinion of the majority that indicated—

First choice	101 cases	or 17.21	per cent
Second choice	158 cases	or 26.92	per cent
Third choice	135 cases	or 23	per cent
Fourth choice	39 cases	or 6.64	per cent
Favoring, but choice not specified	143 cases	or 24.36	per cent
Not favored	11 cases	or 1.87	per cent

In case of unemployment, the results of the inquiry were as follows:

First choice	63	or 10.74	per cent
Second choice	145	or 24.07	per cent
Third choice	108	or 18.40	per cent
Fourth choice	92	or 15.67	per cent
Favored, but choice not specified	150	or 25.55	per cent
Not favored	29	or 4.94	per cent

Thus only a little over 35 per cent were in favor of unemployment as the first or second choice.

Finally, the survivors' insurance, or insurance of widows and orphans pensions on the whole, is considered to be the last branch of social insurance to be undertaken. It is likely, however, that one difficulty with this part of the question was the lack of familiarity of many with a comparatively new term. The results of the inquiry were as follows:

First choice	23	or 3.92	per cent
Second choice	38	or 6.47	per cent
Third choice	99	or 16.87	per cent
Fourth choice	177	or 30.15	per cent
Favored, but choice not specified	234	or 39.86	per cent
Not favored	16	or 2.73	per cent

Taking the replies as a whole, the consensus of opinion appeared to be that the proper order in which various branches of social insurance should be undertaken is as follows:

1. Sickness or health insurance.
2. Old age insurance.
3. Unemployment insurance.
4. Survivors' insurance.

The decision of the commission to concentrate its efforts on health insurance appears to be supported by an overwhelming opinion of the American students of economic and social problems.

The blank contained a few additional questions to bring out the attitude of these students on the few essential problems of social insurance.

As between the contributory insurance system and the straight government pension system the consensus of opinion was overwhelmingly in favor of the insurance method.

In favor of the insurance system	476	cases or	81.09 per cent
In favor of the insurance system with qualifications as to old age	19	cases or	3.24 per cent
In favor of straight pension system	42	cases or	7.16 per cent
In favor of straight pension system, with various qualifications	7	cases or	1.19 per cent
Preference not specified	43	cases or	7.32 per cent
Total	587	cases or	100 per cent

Notwithstanding this rejection of the straight pension system, the majority of the replies went in favor of the state bearing at least a part of the costs.

In favor of state bearing part of costs	428	or	72.91 per cent
In favor of state bearing part of costs, with qualifications	62	or	10.55 per cent
Opposed to state contributions	59	or	10.06 per cent
Preference not specified	38	or	6.48 per cent

Practically five-sixths of all the replies, therefore, were in favor of state contributions, and only a few of them with some qualifications. Still more conclusive is the evidence concerning the desirability of placing part of the costs of social insurance upon the employers or industries.

In favor of employers contribution	497	or	84.67 per cent
With certain qualifications	38	or	6.47 per cent
Opposed to employers contributions	32	or	5.45 per cent
Preference not specified	20	or	3.41 per cent

The question has frequently been raised as to state action versus federal action. On this subject, the division of opinion is less decisive.

In favor of state action	262	or	44.64 per cent
In favor of state action, with qualifications	41	or	6.91 per cent
In favor of federal action	228	or	38.83 per cent
In favor of federal action, with qualifications	15	or	2.56 per cent
Preference not specified	41	or	6.98 per cent

From comments made on this question, it appears clearly that the economic advantages of federal action are recognized by a very large number of these students, but state action is usually preferred simply for constitutional reasons.

The attitude of this particular group of people, who, because of their study of social problems, are in a position to influence public opinion,

or at least to foresee the probable cause of legislative action, may be summarized as follows:

(*a*) Nearly 87 per cent were in favor of social insurance.
(*b*) Of these over 76 per cent preferred a compulsory system to voluntary insurance.
(*c*) The order in which social insurance should develop is indicated as follows:
1. Health insurance.
2. Old age.
3. Unemployment insurance.
4. Widows and orphans pensions.
(*d*) Over 80 per cent of these students prefer a system of contributory insurance to straight government pensions.
(*e*) Although opinions are about equally divided, on the whole state action is preferred to federal action, this being largely influenced by questions as to the constitutionality of the latter.
(*f*) Some 83 per cent are in favor of the state bearing part of the costs.
(*g*) Over 90 per cent are in favor of employers or industries bearing part of the costs.

The general standards announced within the last year or two by such institutions as the Commission on Industrial Relations, the United States Public Health Service, and the American Association for Labor Legislation, are, on the whole, accepted by American students.

CHAPTER IX.

ESTIMATES OF COST.

SECTION I.

ESTIMATE OF NUMBER SUBJECT TO HEALTH INSURANCE.

In order to arrive at any reasonable estimate of the cost of any proposed compulsory insurance scheme, it is obviously necessary to begin with an estimate as to the probable number of persons who might come under such a scheme. The problem is not a simple one. The latest data on occupational statistics are those collected by the United States Census office for the Thirteenth Census of 1910. But though a question was asked in the schedule to determine the status of each person, as employer, salaried man, wageworker, or self employed, such information was not compiled in sufficient detail, and practically was entirely omitted in compiling figures from separate states. It became necessary therefore to go through the entire classification of occupations in California, picking out such groups as are palpably wageworking or salary earning, and to make more or less arbitrary assumptions as to the proportion of wageworkers and salaried employees in certain mixed groups, as, for instance, barbers, blacksmiths, etc., where the employer, employees, and self-employed persons were thrown together in one census class. The summary of this work is shown in the tables on page 292. The assumptions made had necessarily to be rather crude. In certain groups it was assumed that about 50 per cent of the total class would be wageworkers or salaried employees, and in a few others a smaller percentage was taken. Because of the recognized tendency of statistical errors due to assumption to balance each other, it is felt that the total errors introduced by such necessary assumptions can not be very large. The totals obtained from the census reports indicate that out of 932,752 males gainfully employed in 1910, 658,144, or 70.6 per cent were in the group of wageworkers, or persons of small salaries, and out of 174,916 females gainfully employed in 1910, there were 138,468, or 79.2 per cent in these groups. In arriving at these figures not only proprietors of industrial establishments were omitted, but also such groups of presumably higher economic standing, as insurance agents or officials of corporations, etc.

It was also thought advisable to exclude farm laborers working at home, that is, on a farm owned by the family, as it is difficult to establish any wage relationship in such cases.

These data refer to 1910, and the population of the state of California has materially increased since then. The estimates of population made by the United States Census office are based upon the rate

of growth between the preceding two censuses of 1900 and 1910, and indicates an annual increase of about 4 per cent. It is somewhat doubtful whether such rate of increase has been kept up during the current decade, and especially since the beginning of the European war. In the absence of anything accurate a general loading of about 25 per cent to allow for the period, 1910 to 1917, therefore appears reasonable. In round figures the number of persons within this broad group of wageworkers, or low-salaried employees for 1917, would appear to be as follows:

Males	823,000	
Females	172,000	
Total	995,000	wage earners in California

Since the extent of any social insurance law must necessarily be carefully defined, and may often be more or less limited for various considerations, to certain occupational groups, it becomes necessary to make estimates of the persons likely to be brought under various assumptions as to the classes to be covered.

The census report for 1910 classifies the occupations into nine groups, and the number of wageworkers and employees in each one of these nine groups is indicated on page 292. This classification, however, differs materially from that of the preceding census of 1900, and does not quite fall in line with the definitions of the various industrial or occupational groups which are commonly found in acts of labor or social legislation. Thus, for instance, several of the groups including agriculture and forestry in the census report did not come under the legal definition of manufactures, and again other groups classified by the census as domestic and personal service would very properly be classified either with manufacturers or with trade, as, for instance, laundry or hotel and restaurant keepers.

For the purposes of social insurance the following broad classifications appear desirable:

1—Manufactures.
2—Building and Construction.
3—Mining.
4—Transportation.
5—Commerce.
6—Clerical Employees.
7—Professional Services.
8—Public Service.
9—Agriculture.
10—Domestic Service.
11—Miscellaneous.

Estimates of the total number of employees and wage workers which fell into each of these eleven groups in 1910, and also estimates

of corresponding numbers for 1917, on a general assumption of an increase of 25 per cent during the seven years, are shown in the table on page 292.

The maximum number of persons who might come under the act, would then appear to be somewhat less than a million. The number who would come under the act on the various limitations is also shown on page 292. **On the strictest limitation of the extent of the social insurance law if made applicable only to manual workers in manufactures, construction and mining, the number would only be 366,000.** Such restrictions do not appear very equitable or desirable, but are not unknown in the history of social insurance. If transportation and trade should be added the number would increase to approximately 606,000, and the addition of clerical employees would raise it to 697,000. Of the remaining groups only two, namely, agriculture and domestic service, are numerically of importance. **With the two groups of agriculture and domestic service eliminated, the total number would shrink to 750,000.**

In actual practice much more minute subdivisions are found in social insurance acts. For various reasons certain smaller groups may be either specifically included or excluded from the general social insurance act, and the number of persons covered correspondingly increased or decreased.

The general conclusion that there are approximately about one million wageworkers and low-salaried earners in California appears somewhat startling at the first glance when compared with its population of approximately 3,000,000.

When health insurance was introduced in the legislature of the state of New York, estimates of the number of persons who would come under the act were made at about two and a half millions, or about 25 per cent of the population. In explanation of the very much higher ratio for the state of California it is necessary to point out some peculiarities in the statistical make-up of the population of this state, which differs substantially from that of the population of the east or middle western states.

1. *Difference in sex distribution.* For each 100 females in the United States, there were in 1910, 106 males, and in New England only 99 males, but in California, 125.5 males. If, for instance, the proportion of females to males in California in 1910 were the same as in New York, the total population would have amounted to 2,630,000 instead of 2,357,000.

2. *An equally marked difference in age distribution.* The proportion of population under 10 years of age for the country at large in 1910, was 42 per cent, while in California it was only 31 per cent. Thus if the proportion of children in California were

equal to that in the country at large, its population in 1910 would have been 2,828,000 instead of 2,357,000. If California had both the number of women and children in proportion to its adult male population that the entire country shows, then its population in 1910 would have been 3,121,000. An increase of 25 per cent between 1910 and 1917 would have given California in 1917 nearly 4,000,000. In other words, as far as its working population is concerned, California approaches that of a state with 4,000,000 rather than 3,000,000 population.

3. *Furthermore,* even in the distribution of persons gainfully employed, some differences no less significant, occur. Thus, for instance, for the 5,865,000 farmers in the country as a whole, there were in 1910, 5,975,000 farm laborers, and of these 3,310,000 worked on their own farms, and only 2,665,000 worked out.

In California there were 56,774 farms and 83,128 farm laborers, and of these as many as 72,157 worked out. Thus again for every 100 farmers, there were

	United States	California
Laborers working on their own farm	56.4	19.0
Laborers working out	45.1	125.2
Totals	101.5	144.2

Since only the second group of farm laborers is to be considered under a social insurance act, the difference between the California situation and that in other states is obvious. It is of course possible that during the last seven years a change in the make-up of the population of the state of California would bring it nearer to that of the rest of the country, but the information available does not point in that direction.

It is significant, for instance, that the proportion of males to females has actually increased from 123.5 per cent in 1900 to 125.5 per cent in 1910.

The proportion of children under 5 to the total population has also declined from 8.5 per cent in 1900 to 8.1 per cent in 1910.

Furthermore, while the number of farmers seems to have declined from 61,753 to 59,633, the number of farm laborers, not members of families, has increased from 51,280 to 85,199. In other words, as far as comparison between 1900 and 1910 is concerned, the difference between the make-up of the population in California and in the country at large seems to be rather accentuated, than otherwise.

There are, of course, certain factors of exaggeration in the estimate of 995,000. Various limitations are found in the social insurance acts

which may reduce this number in other ways besides the elimination of certain occupational groups. Thus there is an age qualification at either end of the productive period. The number of children under 16 employed in California, according to the data of 1910, is comparatively slight, and possibly has been reduced since then. On the other hand, however, occupational statistics will usually include persons of advanced ages who have passed beyond the limit of their industrial activity, but continue to designate themselves by certain occupations which they had pursued in the past. Either through a definite limitation at the age of 70, or some other period, or through the simple fact of these individuals being unable to find employment, they would be kept out of the insurance system. How large a reduction this consideration would make in the total of 995,000 it is impossible to ascertain with any degree of accuracy.

The census of 1910, in its report on occupations according to ages, puts all persons of 45 and over into one group. The earlier census of 1900 indicates that some 6 per cent of the males reported in occupations and 2 per cent of the females reported in occupations are over 65 years of age. If these ratios are applicable at present a reduction might be effected of some 50,000 in the number of persons under the act.

Another factor in reducing the number of persons insured is the application of the rule limiting the system to persons under a certain annual income of perhaps $1,200 or $1,500. It is extremely difficult, however, to make an estimate as to the numerical effect of such a factor. As far as wageworkers are concerned, the weekly wage level, which is all that statistical records furnish, does not at all indicate the annual income because of the frequency of loss of time by lack of employment. It is for this reason that no exception is usually made in case of wageworkers because of the earning capacity. The situation is somewhat different in case of salaried employees receiving their remuneration on a monthly basis, who do not suffer from unemployment to the same extent. But classified data in regard to salaries are evidently difficult to obtain. Recognizing the importance of this factor, therefore, no estimate of its effect is undertaken.

It gives additional assurance, however, that the estimates made here, as to the number of persons employed, are sufficiently high and that the actual number of persons that might be covered by the act would probably fall below the estimate perhaps by some 5 or 6 per cent.

Statistics of Occupations in California in 1910 (U. S. Census), with an Estimate of Number of Wage Earners and Salaried Employees Who May Come Under a Health Insurance Act—Summary.

Occupations	Total number males	Number estimated subject to health insurance	Total number females	Number estimated subject to health insurance
1. Agriculture, forestry and animal husbandry	217,748	123,844	7,323	2,151
2. Extraction of minerals	31,254	28,953	44	----------
3. Manufacturing and mechanical pursuits	263,480	227,312	30,096	17,528
4. Transportation	100,052	87,288	4,241	4,241
5. Trade	133,663	64,162	17,935	14,692
6. Public service	23,923	11,025	553	196
7. Professional service	41,138	12,135	28,315	21,356
8. Domestic and personal service	78,062	59,993	62,090	53,985
9. Clerical occupations	43,432	43,432	24,319	24,319
Totals	932,752	658,144	174,916	138,468

Estimate of Persons Who May Be Subject to Insurance. Census Data Somewhat Rearranged to Fit with the Usual Designation of Industrial Groups, Rounded Up in Thousands, and Adjusted to 1917, on a Basis of an Increase of 25 Per Cent Over 1910.

Occupations	Census of 1910			Estimate for 1917		
	Male	Female	Total	Male	Female	Total
Manufactures, etc.	133,000	20,000	153,000	166,000	25,000	191,000
Building	111,000	----------	111,000	139,000	----------	139,000
Mining	29,000	----------	29,000	36,000	----------	36,000
Transportation	84,000	----------	84,000	105,000	----------	105,000
Commerce	85,000	23,000	108,000	106,000	29,000	135,000
Public service	11,000	----------	11,000	14,000	----------	14,000
Clerical	45,000	28,000	73,000	56,000	35,000	91,000
Professional	12,000	20,000	32,000	15,000	25,000	40,000
Domestic	26,000	43,000	69,000	32,000	54,000	86,000
Agriculture	107,000	2,000	109,000	135,000	2,000	137,000
Miscellaneous (fishing, etc.)	15,000	2,000	17,000	19,000	2,000	21,000
Totals	658,000	138,000	796,000	823,000	172,000	995,000

Insurance system extended to—	Persons covered (cumulative)		
	Male	Female	Total
Manufacturing, construction, mining	341,000	25,000	366,000
Transportation and trade	552,000	54,000	606,000
Clerical employees	608,000	89,000	697,000
Professional employees	623,000	114,000	737,000
Public service	637,000	114,000	751,000
Agriculture, fishing, etc.	791,000	118,000	909,000
Domestic	823,000	172,000	995,000
Deduct interstate traffic	783,000	172,000	955,000

SECTION II.

COMPUTATION OF PAY ROLL EXPOSED.

Certain of the benefits under a system of health insurance, especially those granting cash amounts, usually depend upon the wages of the beneficiary. Only in one European act are the benefits given equal, irrespective of the earning capacity. It becomes necessary, therefore, for the purpose of making an estimate of cost to determine the probable pay roll exposure, or the total amount of wages earned by persons included within the act. Many difficulties are met in such an effort.

One is the lack of sufficient information concerning the wages in many of the occupational groups which might come under the law.

The second difficulty arises from the fact that wage statistics are only given for weekly periods, and it does not at all follow that annual pay roll exposure in each case would be equal to 52 times the weekly amount. The computation made in the following table therefore is entirely on a weekly basis and the various problems arising out of the necessity of converting the weekly pay roll into an annual pay roll will be discussed later on.

Finally, not a small percentage of workers' wages rise to a fairly high level. It seems to be the consensus of opinion that a health insurance system at present need not grant benefits over a certain amount. Such a limitation appears useful to reduce the total cost, and also because it only affects individuals of the highest wage groups who are able, if willing, to obtain some additional insurance protection of their own free will. Tentatively, a maximum of $15.00 a week as the weekly benefit, was adopted, and a basis that a normal sick benefit in cash amounts to two-thirds of the weekly wages. It follows therefrom that wages over $22.50 need not be considered in computing the cost of the system of health insurance. This pay roll exposure where any excess over $22.50 has been disregarded, is called in the table which follows "The adjusted pay roll exposure."

In order to obtain such an adjusted pay roll exposure it is not enough to have the average wage of any occupational group, but also the wage distribution is necessary. This, however, is impossible to obtain for certain occupational groups, and in such cases a small arbitrary discount was assumed, approaching in amount the discounts obtained by computation of available data in other groups.

Sources of Wage Statistics.

The sources of information from which various computations concerning wages were made must be given here in brief:

1. *Manufacturers. Male Groups.*
   Source: Report of California Bureau of Labor Statistics, 1914. Computation was made to show the average wage of $17.58, and an adjusted wage of $16.87.
2. *Building and construction trades.*
   Rate of union wages computed from the data obtained from the California Bureau of Labor Statistics (see this report, Chap. III, Sec. I), indicating average wage $26.25; adjusted wage, $22.00.
3. *Mining.*
   Classified wage data not available. The United States census of 1910 shows a total wage expenditure of $19,049,442, an average number of employees 23,358, which indicates an average weekly wage of $15.62.
4. *Transportation.*
   Data in regard to various groups are difficult to obtain. Two sources have been utilized: First, railroad wages compiled for this report from data furnished by the California Railroad Commission, and, second, data as to standard wage scales for transportation unions, as shown in Chap. III, Sec. I, of this report.

Occupation	Actual average wage	Adjusted average wage
Railroads	$17.81	$16.84
Other transportation occupations	18.37	17.41

Since railroad employees constitute about 40 per cent of all transportation employees weighted, the average was obtained by using the weight of four for the railroad employees and six for the others. The result was an average wage of $18.15 and an adjusted wage of $17.18.

5 and 6. *Commerce and Public Service.*
   Wage statistics in regard to these groups are rather difficult to obtain and somewhat arbitrary. An average of $20.00 a week was assumed, with a reduction to $19.00 for the effect of the maximum limit.
7. *Clerical.*
   The same absence of accurate data is found in this group, the wages running somewhat below that in commercial positions. An average of $18.00 assumed, with a reduction to $17.00 to effect the maximum limit.
8. *Professional services.*
   Teaching profession was taken as a fairly representative sample of this occupational group. Reports of the United States Bureau of Education indicate an average annual salary

of $1,153.00 for male public school teachers in California, or a weekly average of $22.20. Since the maximum effective wage is $22.50, the adjusted wage was assumed to be about $20.00.

9. *Domestic service.*
   The general standard of wages in domestic service for male employees seems to justify an average of $12.00 per week without any reduction for the maximum.
10. *Agriculture.*
    According to the "Crop Reporters" issued by the United States Department of Agriculture, an average monthly wage, if agricultural labor, without board, in the State of California, according to the last data, was $51.00 a month, or $11.77 per week.
11. *Miscellaneous groups.*
    For the small miscellaneous groups an arbitrary average of $20.00, with discounts to $19.00 on account of the maximum was accepted.

Female Groups.

1. *Manufacturers.*
   Computation from the data of the report of the Industrial Welfare Commission of the state of California indicates an average of $9.70.
2. *Commerce.*
   Similar computations from the same report indicate an average of $10.36.
3. *Clerical.*
   According to the same report the indicated average is $10.89.
4. *Professional.*
   Salaries for female professional workers being only slightly below those for male professional workers, an average of $20.00 was assumed, with a reduction to $19.00 for effect of the maximum.
5. *Domestic.*
   The average wage for female domestics, plus the value of room and board, is about $10.00 a week.

6 and 7. *Agriculture and miscellaneous.*
The number of females in the groups of "agriculture" and "miscellaneous" is very small. Wage levels, $10.00 for agriculture and $12.00 for miscellaneous, are assumed somewhat arbitrarily.

With this information and the assumptions made above as a basis, the total weekly pay roll exposure in round figures was found to equal $17,146,000, with a reduction to $16,100,000 for the effect of maximum limits. As already explained, this total will depend upon what occupational groups are included under the law, and the total for the various probable combinations are given in this table, fluctuating from $9,277,000 to $17,146,000. No high percentage of scientific accuracy must be claimed by these estimates, but they are probably sufficiently dependable to serve as a basis for a rough estimate in computations of cost.

COMPUTATION OF WEEKLY PAY ROLL OF WAGEWORKERS AND EMPLOYEES.

Males.

Industries	Number of persons	Average wage	Total weekly pay roll	Adjusted wage	Adjusted weekly pay roll
Manufactures	166,000	$17 58	$2,918,000	$16 87	$2,800,000
Building, etc.	139,000	26 25	3,649,000	22 00	3,058,000
Mining	36,000	15 62	562,000	15 62	562,000
Transportation	105,000	18 15	1,906,000	17 18	1,804,000
Commerce	106,000	20 00	2,120,000	19 00	2,014,000
Public service	14,000	20 00	280,000	19 00	266,000
Clerical	56,000	18 00	1,008,000	17 00	952,000
Professional	15,000	22 20	333,000	21 20	318,000
Domestic	32,000	12 00	384,000	12 00	384,000
Agriculture	135,000	11 77	1,589,000	11 77	1,589,000
Miscellaneous	19,000	20 00	380,000	19 00	361,000
Totals	823,000		$15,129,000		$14,108,000

Females.

Manufactures	25,000	$9 70	$242,000	$9 70	$242,000
Commerce	29,000	10 36	310,000	10 36	310,000
Clerical	35,000	10 89	381,000	10 89	381,000
Professional	25,000	20 00	500,000	19 00	475,000
Domestic	54,000	10 00	540,000	10 00	540,000
Agriculture	2,000	10 00	20,000	10 00	20,000
Miscellaneous	2,000	12 00	24,000	12 00	24,000
Totals	172,000		$2,017,000		$1,992,000

Totals.

Manufactures	191,000	$16 44	$3,160,000	$15 82	$3,042,000
Building	139,000	26 25	3,649,000	22 00	3,058,000
Mining	36,000	15 62	562,000	15 62	562,000
Transportation	105,000	18 15	1,906,000	17 18	1,804,000
Commerce	135,000	18 00	2,430,000	17 28	2,324,000
Public service	14,000	20 00	280,000	19 00	266,000
Clerical	91,000	15 48	1,389,000	14 64	1,333,000
Professional	40,000	20 82	833,000	19 82	793,000
Domestic	86,000	10 74	924,000	10 74	924,000
Agriculture	137,000	11 74	1,609,000	11 74	1,609,000
Miscellaneous	21,000	19 24	404,000	18 33	385,000
Totals	995,000	$17 23	$17,146,000		$16,100,000

Weekly payroll—

Manufactures, building, mining and transportation	$9,277,000
Commerce and clerical	13,096,000
Public service and professional	14,209,000
Domestic and agriculture	17,146,000

PROBABLE RATE OF SICKNESS.

The next step, in an effort to estimate in advance the cost of any health insurance scheme, is the factor of rate of sickness, which is evidently of paramount importance. It is extremely difficult to establish a reliable sickness rate in advance of some system of health insurance. Practically all the available statistics of sickness which have any scientific value have been obtained from the study of results of sickness insurance organizations. Not only must there be a substantial motive for accurate reporting of sickness, which nothing except some system of compensation for sickness will create, but more important is the fact that the general basis of sickness statistics must be established not so much on a day of sick feeling, but a day of disability accompanying sickness. **Being or feeling sick is purely a subjective matter which can scarcely be recorded statistically. But being unable to pursue the employment, and especially receiving compensation for such disability is a definite fact which yields itself to statistical observation. Thus the measurement of disability is made possible only by the granting of benefits for loss of time. And what we call sickness statistics deals not with sickness, perhaps not even the disability, but with compensated sick days, and the sickness rate will depend upon the particular provisions of the health insurance system granting compensation.**

The usual way to record sick rate, is by the number of days of compensated disability per the insured person per annum. It is well recognized that this sick rate fluctuates under the influence of a great many conditions of which the essential ones are: sex, age and occupation. And it is customary in actual practice to compute sick rates according to each one of these three conditions. The understood assumption is equally true, however, of other conditions, which in a final analysis may even be more important. Namely, climate, locality, general sanitation and general economic status of the community.

It is recognized that it is somewhat dangerous to adopt, without criticism, sickness rates derived from experience of other countries, and therefore a very earnest effort was made by this commission to obtain as much data as possible bearing upon this problem from various sick benefit associations of this state. The difficulties were great because the records of small lodges, and other similar societies, are not kept in a very systematic order, and but few organizations were willing to furnish these data in detail even when they had it. Such data as have been obtained are presented in the table on page 305. It would have been altogether impossible to analyze those data with regard to age or even occupation, and therefore a general average for the organization is all that could be computed. The experience presented in this table refers to lodges only, where all kinds of trades

and occupations are represented, and wageworkers constitute only a portion of the membership. The total volume of experience is very small as compared with some European sources. Nevertheless, 110,000 years of exposure are at least indicative of the general trend. The fact that the results are fairly uniform of the various sources from which information has been obtained is significant in establishing a prima facie trustworthiness of the result.

The apparent average sick rate thus obtained equals .56 of one week, or 3.92 days per member. The sick rate is evidently derivative of two factors, the percentage of insured persons disabled by sickness throughout the year and the average duration of disability in each case. On a somewhat smaller exposure the first factor proved to be 10 per cent and the latter 5.49 weeks, or 38.4 days. The average sick rate obtained by multiplication of these two factors is 3.84 days, and the slight difference between this and the sick rate given above is due to the fact that because of incomplete information the volume of exposure for each factor is not exactly identical.

It would be unsafe of course to accept these figures without further scrutiny, not only because of the limited exposure but also because of the peculiar condition to which the result must at least partly be due.

To begin with, this experience deals with lodges whose membership on the whole is different from that which would be subject to compulsory health insurance. A small amount of experience was obtained from trade union sickness funds, which would be more significant for our purpose and would be expected to show a higher sick rate. These results by trade are shown on Table No. 2, and somewhat unexpectedly the average sick rate for some 16,500 years of exposure is only .433 weeks, or 3 days per member, the percentage of cases being only 8.1, and the average duration of a case, 5.4 weeks, or practically the same as in the case of lodges.

One of the obvious disturbing factors is the difference in benefit provisions. The duration of benefits in various lodges and various trade union funds vary very much, the limit being ten weeks in some cases and running up as high as 52 weeks in others, while some lodges do not have any limit at all, though reducing the amount of benefits as the case extends. Naturally the lodges, or benefit fund, record only the time for which they have paid compensation.

Again, other provisions, such as for instance in regard to a waiting period in the beginning of each case for which no benefits are paid, are different and vary from none at all to as much as 14 days, thus effecting very substantially the total amount of sick days paid for. Thus, of all the fraternal orders whose published reports were available to the commission, the Independent Order of Odd Fellows was the

only one who kept a record of the weeks of sickness paid for by the entire order in the state of California. This experience is shown separately in Table 3, for the three years 1912, 1913 and 1914, and for this one order presents a substantial exposure of over 137,000 years, for which the percentage of cases is not high, being 9.27 per cent. The average duration of the case amounts to 9.27 weeks, or nearly 65 days, and the average sick rate of membership is .859 weeks, or a little over 6 days. This, however, is due to the fact that most lodges of this order carry their beneficiaries on the roll indefinitely, though reducing the weekly benefit to $4.00, $3.00 and $1.00 a week, and the effect of this ruling is seen in the very long duration of the individual case, being nearly 65 days against 38 days for other lodges. The experience of this particular order is mainly useful in indicating the outside limit of the sick rate among the groups of persons usually affiliated with lodges.

In order to arrive at some responsible estimate of the amount of sickness that may be expected it becomes necessary therefore, to look for other sources of information, both in the United States outside of California, and in European countries as well. All such information, however, is unfortunately very fragmentary because of the absence of any systematic sickness statistics in this country, and the difficulty of applying European experience to American conditions without reservation.

The experience of many European countries, as far as available, was brought together in Tables 4 to 6, showing—

1—The number of cases of sickness per 100 insured members.

2—The average duration per case of sickness, and

3—Average number of days of disability per member.

The data was given for Germany, Austria, France, Belgium and Hungary, wherever possible for male and female separately. It also seemed worth while to give these data for as many years as information was available.

The fairly wide range of fluctuation between one country and another will be observed at first glance. There were also some changes in the sickness rate of the individual countries through the long period of years, but these changes are not so wide. It is significant that the variations in the reported sickness rate (days per insured), are largely due to the percentage of insured taken sick, rather than to the average duration of a case of sickness.

It is often assumed that the increase in the sick rate of some countries is entirely due to the increase in the tendency to malingering or what Mr. I. G. Gibbon called "valetudinarianism." But it must be remembered that these data present days of compensated illness only. In all the European systems, compulsory as well as voluntary, there has been

a continuous tendency to extend the periods of benefits, and that alone must explain a large part of the increase of the average sick rate.

There are many other factors which must explain the variations of sick rates in different countries.

1. *Differences in sex distribution.* The sick rates of the two sexes frequently shows large differences, and the proportion of women in industries differs in different countries. This has been partly eliminated in the table by giving the rate for each sex.

2. *Differences in age distribution.* The sick rate rises rapidly with age. The famous Manchester Unity experience, for instance, shows less than one week under 30; rises from one to two weeks between the ages of 30 and 47, and continues rising very rapidly after that, to 3.4 weeks at the age of 55, 5.2 at 60, and 14.6 weeks at the age of 70, etc.

3. *Differences in occupational distribution.* The range of sickness rates between the occupational groups at the extreme ends is sometimes as high as 300 per cent.

4. *Differences in general factors affecting health conditions,* such as climate, sanitation, personal habits of living, including alcoholism, personal, public and industrial hygiene, etc.

5. *Differences in the duration of benefits,* whether for 10, 13, 20, 26 weeks, or even 52 weeks, or perhaps the absence of a time limit merging insurance into invalidity and old age insurance; also differences in provisions as to the waiting period, which are very important because they affect each case.

6. Finally, *the differences in the psychology of the insured,* as shown by the readiness to claim benefits under the insurance contract.

Comparing the sick rate of the California lodges with that developed by most European countries, it is found that the California rate is lower than almost any one of them, and especially lower than that shown by the compulsory insurance systems. This naturally raises the query, how far California data are reliable, even though it may be assumed that the climatic and social conditions in California favor a lower sick rate.

Valuable light is thrown upon this problem when the sick rate is resolved into its two component factors—

(*a*) The proportion of cases to 100 insured persons.

(*b*) The average duration of a sickness case.

The first is found to be only 10 per cent as against 30, 40 or even 50 per cent under some compulsory systems, while the duration is found to be 38 days, or twice as long as in most European countries. The evident explanation suggests itself, that under a loose voluntary system of sickness insurance, such as lodges or even trade union funds represent, numerous light cases are not reported at all, and not made subject to claims. This is due to the fact that the insurance is combined with many social and economic factors, and that a considerable proportion

of the membership of the lodges is of a higher economic level and not particularly disturbed by a case of illness of a short duration.

To test this hypothesis a normal table of distribution of sickness cases, according to duration, has been constructed on the basis of the experience of the Leipzig Sickness Insurance Fund for two years, including some 180,000 cases, and also a similar table on the basis of some 6,700 cases in California, for which the necessary information has been ascertained. (See tables VII and VIII, page 310.)

The total duration of the cases of each table has also been computed on the assumption that the average duration for each group was equal to the mean between the two limits of duration. And in view of the narrow limits such an assumption is justified.

A comparison of these two tables, converted to a basis of 100,000 cases, indicates the following results:

Average duration for a Leipzig case, disregarding any disability after the end of 26 weeks, was about 3.54 weeks, or some 25 days, and the duration in the California cases 5.42 weeks, or nearly 38 days.

The greatest difference between the two tables is found in the number of cases lasting over two weeks. In the Leipzig series over 46 per cent fall below two weeks duration, and in the California series only 28 per cent.

The ratio between the average duration of a case in California as compared with Leipzig, appears to be 1.54. A comparison was made between the two series in excluding cases under one week, under two weeks, under three weeks and under four weeks, and the ratio of the average duration drops to 1.43 when all cases under one week are excluded, to 1.27 when cases under two weeks are excluded and to 1.22 only after all cases under three weeks are excluded, and to 1.6 only after all cases under four weeks are excluded. The average duration of cases extending over four weeks then is 8.5 weeks in Leipzig and 9.8 weeks in California. (See table IX, page 311.)

This comparison makes it quite certain that one reason for the apparently low sick rate of the California lodges is the failure to give sick compensation for cases of shorter duration, and that this especially affects cases under two weeks, and partly even cases from two to four weeks.

On this basis a correction may be made to the report taking into account this failure to ask for compensation in many cases of short duration.

According to the two tables of experiences, every 1,000 cases are distributed as follows:

Leipzig.

Duration	Number of cases	Total duration	Per cent
Under 4 weeks	741	1,354	38.19
Over 4 weeks	259	2,191	61.81
Totals	1,000	3,545	100.00

California.

Under 4 weeks	566	1,153	21,27
Over 4 weeks	434	4,269	78.73
Totals	1,000	5,422	100.00

If then we assume for California the same proportion between cases under and over four weeks duration, and the average duration of cases under four weeks being about the same, the experience for California would stand corrected about as follows:

Duration	Number of cases	Average duration	Total duration
Under 4 weeks	1,242	1.85	2,298
Over 4 weeks	434	9.84	4,269
Totals	676		6,567

This results in an increase of 67.6 per cent in the number of cases and 21 per cent in the total duration. With these corrections the proportion of cases of 100 members rises to 16.8, and the average sick rate from 3.84 to 4.65 days.

This approaches very much more closely the sick rate of at least some European countries, especially in the earlier days of compulsory insurance.

As a further check upon this figure various information available in regard to sick rates in the United States has been brought together. The well known federal investigation of workmen's insurance in the United States known as the twenty-third annual report of the United States Commissioner of Labor, contains much of this information which has been utilized as far as possible.

A few international labor organizations have been giving sickness benefits for some years. On a basis of the data available in the report above referred to, and various information as to membership of these international unions, the sick rates for some of the unions have been

compiled in Table X. They are found to vary almost violently between 1.3 days and 6 days per member, the latter figure being the highest shown by any of these international unions.

It is somewhat dangerous to assume the accuracy of these sick rates as representing differences between various trades and occupations, because of the uncertainty of information obtained.

The union that perhaps has the most extensive experience with sick benefits is the International Cigar Makers Union, for which a record is available from 1881 to 1914, and this valuable experience is shown in Table XI. The significant conclusion to be derived from this table is the gradual increase in the average sick rate, and also that notwithstanding this—the sick rate is even now considerably below one week per member. In fact the highest sick rate is for 1914, amounting to .877 weeks or 6.14 days, and that for many years it was substantially lower than six days, the cigar makers trade being on the whole not a very healthy one.

It is also very significant that the sick rate has risen during the lean years, as for instance from 1893 to 1898, and again in 1908 and in 1914, and showed a tendency to grow smaller during the years of highest business activity, as for instance between 1899 and 1906.

A considerable amount of additional information referring to a large number of so-called establishment funds has been compiled from the same official source. The 415 establishment funds giving sick benefits show a membership of 302, 584, thus giving a fairly large volume of experience. These have been classified in Table XII, on page 313, according to the general line of industry. The average of cases per 100 members was 23 per cent; the average duration of a case was 20.5 days, which approaches rather closely European experience, and the average sick rate per member was 4.7 days. This again shows approximately the same results as the adjusted California experiences.

It will be noticed that Tables X and XII show an adjusted experience as well as actual experience. One difficulty of compiling statistics of different funds, as already explained, lies in the differences in benefit provisions. It is estimated that the experience of any fund could be modified if the benefit was extended, say from 13 to 26 weeks, and the waiting period increased or reduced. Assuming that the distribution of cases according to duration, as shown in Table 7, may be accepted as a normal one, an adjustment may be made both for the waiting period and for the duration of the benefits, and such a table, for the purpose of making such adjustments, was constructed. (Table XIII.) By means of this table when the specific provisions of any fund, as to the waiting period and as to the duration of benefit, are

given, the actual experience may be adjusted to "no waiting period, and 26 weeks duration."

It is found that for most of these establishment funds, as well as for the international union benefit systems, this adjustment results in an increase of sick rate, and for the 415 establishment funds taken together the average sick rate is increased from 4.7 to 5.8, which represents an increase of about 23½ per cent.

It is felt, therefore, on the basis of all this cumulative evidence that a sick rate of 6 days may be assumed for the purpose of making an estimate of the cost, and that at least for some time such an estimate should prove sufficient. Specific evidence should be required at the present time for a higher estimate of sick rate. Evidently this estimate does not take any occupational differences into consideration, though there is no doubt that such occupational differences exist. American data available at present offers no basis for determining this difference quantitatively. Table No. 12 offers a variety of adjusted sick rates from 3.9 and up to 10 days. The highest sick rate is found in the iron and steel industries, and appears to be in harmony with our general knowledge of health conditions. The brewers industry and textile industry seem to indicate the next highest sick rates. The lowest sick rates are found in the brass industries, building, construction, mining, rubber and wood and furniture, and therefore may be taken at present as being to some extent accidental and due to insufficient exposure. Surely that would seem to apply both to the brass and rubber industries. It would be presumptious to undertake to determine at present the general average sick rate for industries as a whole. Nothing but extensive experience under health insurance would offer material for determining the proper sick rates for the different industries and occupations. In the computations which follow, a sick rate of six days per member has been accepted as a basis.

20—27626

TABLE I.

Statistics of California Lodges.

Lodge	No. of Lodges	Years	Rate of Sickness			Percentage Sick			Duration of Sickness		
			Years of exposure of membership	Weeks of Sickness	Average	Members	No. Sick	Per cent	No. Sick	Weeks of Sickness	Average
Knights of Pythias	63	1915	6,276	2,995	.477	5,681	500	8.8	500	2,761	5.522
Native Sons	113	1913-14-15	43,701	22,488	.515	43,701	3,759	8.6	3,759	22,488	5.929
Junior Order United American Mechanics	7	1913-14-15	2,139	1,005	.469	2,139	182	8.5	182	1,005	5.522
Maccabees	1	1913-14-15	1,282	1,380	1.076	1,282	259	20.2	259	1,380	5.328
Young Men's Institute	10	1915	1,125	459	.408	1,125	77	6.8	77	459	5.948
Knights of America	1	1913-14-15	1,050	405	.386	1,050	78	7.4	78	405	5.192
Ancient Order Foresters	1	1915	835	679	.814	835	116	13.9	116	679	5.853
Sons of St. George	5	1915	531	276	.519	531	57	10.7	57	276	4.842
Order of Herman Sons	14	1915	905	653	.721	905	109	12.0	109	653	5.991
Italian Royal Police	1	1915	170	159	.935	170	27	15.9	27	159	5.888
Fraternal Brotherhood	3	1913-14-15	4,896	2,681	.548	4,896	516	10.5	516	2,681	5.196
Woodmen of the World	2	1913-14-15	1,788	1,330	.744	1,788	384	21.5	384	1,330	3.463
Eagles	1	1913-14-15	3,498	1,348	.379	3,498	216	6.2	216	1,348	6.241
Independent Order of Foresters	1	1913-14-15	3,000	1,913	.638	3,000	404	13.5	404	1,913	4.735
Moose (L. A.)	1	1914-15	1,200	450	.375	1,200	97	9.1	97	450	4.639
League of Henry V.	1	1913-14-15	2,100	1,748	.832	2,100	217	10.3	217	1,748	6.212
Moose (S. F.)	1	1913-14-15	13,500	8,262	.612	13,500	1,744	12.9	1,744	8,262	4.737
Ancient Order Foresters	90	1913-14-15	21,507	14,120	.659						
Totals	315		109,503	62,351	.560	87,401	8,742	10.0	8,742	47,997	5.490

TABLE II.

Statistics of California Unions.

Union	Years	Rate of sickness			Percentage sick			Duration of sickness		
		Members	Weeks	Average	Members	Cases	Per cent	Cases	Weeks	Average
Bartenders (Los Angeles)	1913-14-15	1,698	925	.545	1,698	178	10.5	178	925	5.2
Barbers (Los Angeles)	1913-14-15	905	203	.224	905	40	4.4	40	208	5.1
Bakers (Los Angeles)	1913-14-15	815	384	.469	815	73	9.0	73	384	3.9
Carpenters (Los Angeles)	1913-14-15	2,955	1,272	.430	2,955	283	9.6	283	1,272	4.5
Cigarmakers (Los Angeles and San Francisco	1913-14-15	1,315	1,171	.890	1,315	129	9.8	129	1,171	9.1
Printers (Examiner, Tribune, pressmen)	1913-14-15	428	157	.367	428	49	11.4	49	157	3.2
Tailors (Los Angeles, San Francisco)	1913-14-15	1,510	627	.415	1,510	70	4.6	70	627	9.0
Garment Workers (Los Angeles)	1913-14-15	1,364	628	.460	1,364	132	9.7	132	628	4.8
Plumbers (Los Angeles)	1913-14-15	615	355	.577	615	62	10.1	62	355	5.7
Steamfitters (San Francisco)	1915	101	36	.356	101	5	5.0	5	36	7.2
Beer Drivers (Los Angeles)	1913-14-15	244	265	1.086	244	67	27.4	67	265	4.0
Waiters (Los Angeles)	1913-14-15	750	250	.333	750	55	7.3	55	250	4.5
Millmen (San Francisco)	1915	295	187	.634	295	32	10.8	32	187	5.8
Patternmakers (San Francisco)	1913-14-15	555	160	.288	555	27	4.8	27	160	5.9
Tinworkers	1915	51	35	.686	51	11	21.6	11	35	3.2
Elevator constructors	1913-14-15	405	197	.486	405	45	11.1	45	197	4.4
Painters	1914-15	2,200	251	.114	2,200	63	2.9	63	251	4.0
Boot and shoe workers	1915	102	25	.245	102	3	2.9	3	25	8.3
Grocery clerks	1915	275	62	.225	275	11	4.0	11	62	5.6
Totals		16,583	7,190	.433	16,583	1,335	8.1	1,335	7,190	5.4

TABLE III.

Experience of I. O. O. F. of California.

Membership	Sick Average membership	Sickness	Sick weeks	Members sick	Duration of case	Average sick rate
1912	45,367	9.13	38,710	4,140	.853	9.35
1913	46,125	9.56	39,559	4,410	.858	8.97
1914	46,090	9.11	39,928	4,199	.866	9.51
Totals	137,582	9.27	118,197	12,749	.859	9.27

TABLE IV.

Number of Cases of Sickness per 100 Members. (Exclusive of Confinement.)

	Germany			Austria			France			Belgium: Both sexes	Hungary: Both sexes
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes		
1885	42.3	40.7	42.0	------	------	------	------	------	------	26.0	------
1886	38.1	34.7	37.5	------	------	------	25.7	26.5	25.8	26.3	------
1887	36.7	32.4	35.9	------	------	------	25.5	27.5	25.8	26.3	------
1888	33.5	28.8	32.6	------	------	------	25.7	26.8	25.9	28.2	------
1889	34.3	28.9	33.2	------	------	------	28.2	31.3	28.7	27.7	------
1890	38.1	31.6	36.8	49.9	49.5	49.8	36.7	35.1	36.4	29.5	------
1891	35.9	30.8	34.9	43.6	41.6	43.2	32.9	34.3	33.1	32.9	------
1892	36.8	31.1	35.6	45.7	43.6	45.2	33.3	33.9	33.4	32.3	------
1893	40.7	34.5	39.3	47.8	44.1	47.0	33.2	34.6	33.4	32.0	------
1894	31.6	29.5	34.2	44.1	40.6	43.3	32.4	34.9	32.8	30.8	------
1895	37.3	31.2	35.9	47.9	44.0	47.0	33.7	35.3	34.0	31.4	24.8
1896	36.1	30.3	34.8	47.2	40.5	45.7	30.0	32.9	30.5	25.8	37.6
1897	36.8	31.4	35.6	50.1	43.4	48.6	33.5	36.7	34.1	25.6	35.7
1898	35.3	30.6	34.2	49.3	43.9	48.1	32.6	36.8	33.3	27.2	34.8
1899	39.4	33.3	38.0	53.0	46.8	51.7	33.7	36.8	34.0	27.4	41.2
1900	40.2	33.4	38.6	52.3	44.1	50.5	------	------	33.2	29.6	35.9
1901	39.1	32.3	37.5	52.5	44.6	50.8	------	------	32.2	29.9	38.5
1902	37.8	31.6	36.3	49.4	41.3	47.6	------	------	29.8	27.8	37.3
1903	38.3	33.0	37.0	51.0	43.4	49.3	------	------	29.2	27.5	37.4
1904	40.9	35.4	39.5	51.0	42.4	49.1	------	------	------	25.7	39.1
1905	41.4	35.0	39.8	54.1	44.5	51.9	------	------	------	------	40.0
1906	39.4	35.4	37.8	51.1	41.4	48.8	------	------	18.9	------	41.1
1907	42.7	35.6	40.8	55.4	46.3	53.3	------	------	20.2	------	------
1908	44.3	36.6	42.2	------	------	54.2	------	------	18.1	------	------
1909	------	------	42.7	------	------	52.3	------	------	19.5	------	------
1910	------	------	43.1	------	------	49.6	------	------	21.1	------	------
1911	------	------	43.3	------	------	52.1	------	------	------	------	------
1912	------	------	46.1	------	------	50.1	------	------	------	------	------
1913	------	------	45.5	------	------	51.8	------	------	------	------	------

TABLE V.

Average Duration of Case of Sickness.

	Germany			Austria			France			Belgium: Both sexes	Hungary: Both sexes
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes		
1885	14.1	14.1	14.1	------	------	------	------	------	------	22.6	------
1886	15.4	15.3	15.4	------	------	------	18.1	11.9	17.0	24.3	------
1887	15.5	16.0	15.6	------	------	------	17.8	11.9	16.7	22.2	------
1888	16.6	17.7	16.8	------	------	------	17.4	11.7	16.4	21.6	------
1889	16.1	17.5	16.4	------	------	------	16.7	11.0	15.7	20.5	------
1890	16.0	17.2	16.2	14.7	17.1	15.2	15.7	11.4	15.1	19.9	------
1891	16.8	18.2	17.0	16.0	18.7	16.6	15.8	11.2	15.0	19.8	------
1892	17.0	18.3	17.3	16.0	18.4	16.5	16.1	11.9	15.5	19.8	------
1893	16.2	17.8	16.5	15.9	18.2	16.4	15.9	11.4	15.2	19.4	------
1894	17.1	19.4	17.5	16.9	19.1	17.4	16.3	13.6	16.8	19.1	------
1895	16.8	18.9	17.2	16.3	18.7	16.8	16.8	14.0	16.4	19.3	10.9
1896	16.8	19.1	17.2	16.5	19.1	17.0	20.5	24.6	20.9	20.8	11.2
1897	16.9	19.4	17.4	16.3	19.0	16.9	20.9	27.2	21.5	20.6	11.7
1898	17.1	20.2	17.7	16.4	19.3	17.0	20.8	25.1	21.3	19.5	13.1
1899	16.7	19.9	17.4	16.2	18.7	16.7	21.3	29.8	22.2	20.5	12.3
1900	17.0	20.1	17.6	16.3	19.3	16.9	------	------	21.8	20.2	12.9
1901	17.8	20.9	18.4	16.6	19.9	17.1	------	------	21.4	20.2	13.5
1902	18.2	21.3	18.8	17.2	19.8	17.7	------	------	21.4	20.0	13.8
1903	18.1	21.9	19.0	17.0	19.8	17.6	------	------	22.2	20.0	13.4
1904	18.7	23.2	19.7	16.9	19.6	17.4	------	------	25.8	20.0	13.8
1905	18.7	23.5	19.8	16.7	19.6	17.3	------	------	------	------	13.4
1906	18.5	24.1	19.8	16.8	19.8	17.3	------	------	22.1	------	12.7
1907	18.5	23.4	19.6	16.6	19.5	17.1	------	------	22.3	------	------
1908	18.9	23.5	20.0	------	------	16.6	------	------	23.9	------	------
1909	------	------	19.7	------	------	16.9	------	------	29.7	------	------
1910	------	------	19.8	------	------	16.3	------	------	21.9	------	------
1911	------	------	19.8	------	------	16.7	------	------	------	------	------
1912	------	------	19.7	------	------	16.9	------	------	22.0	------	------
1913	------	------	19.9	------	------	17.4	------	------	24.6	------	------

TABLE VI.

Average Number of Days Per Insured Person.

	Germany			Austria			France			Belgium: Both sexes	Hungary: Both sexes
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes		
1885	5.93	5.71	5.89							5.88	
1886	5.85	5.30	5.75				4.65	3.15	4.39	6.39	
1887	5.69	5.19	5.60				4.54	3.27	4.31	5.84	
1888	5.56	5.08	5.47				4.47	3.14	4.25	6.09	
1889	5.53	5.07	5.44				4.71	3.44	4.51	5.68	
1890	6.08	5.43	5.95	7.32	8.44	7.57	5.76	4.00	5.50	5.87	
1891	6.02	5.60	5.93	6.99	7.88	7.17	5.20	3.84	4.97	6.51	
1892	6.27	5.70	6.15	7.32	8.00	7.46	5.36	4.03	5.18	6.40	
1893	6.60	6.15	6.50	7.59	8.04	7.71	5.28	3.94	5.08	6.21	
1894	6.08	5.72	6.00	7.47	7.74	7.53	5.28	4.75	5.18	5.88	
1895	6.25	5.91	6.18	7.85	8.23	7.90	5.66	4.94	5.58	6.06	2.70
1896	6.05	5.80	5.99	7.80	7.72	7.77	6.15	8.09	6.37	5.37	4.21
1897	6.20	6.11	6.18	8.18	8.25	8.21	7.00	9.98	7.33	5.27	4.18
1898	6.03	6.18	6.07	8.06	8.50	8.18	6.78	9.24	7.09	5.30	4.56
1899	6.59	6.63	6.60	8.58	8.77	8.63	7.18	10.97	7.55	5.62	5.07
1900	6.85	6.71	6.82	8.53	8.49	8.53			7.24	5.98	4.63
1901	6.97	6.75	6.91	8.74	8.42	8.69			6.89	6.04	5.20
1902	6.88	6.71	6.84	8.50	8.18	8.43			6.34	5.56	5.15
1903	6.95	7.20	7.02	8.69	8.58	8.68			6.49	5.50	5.01
1904	7.62	8.23	7.77	8.60	8.31	8.54				5.14	5.40
1905	7.76	8.22	7.88	9.05	8.74	8.98					5.36
1906	7.29	8.05	7.48	8.54	8.19	8.44			4.21		5.22
1907	7.89	8.33	8.00	9.17	9.03	9.11			4.83		
1908	8.37	8.61	8.43			9.00			5.38		
1909			8.40			8.84			4.20		
1910			8.51			8.06			4.64		
1911			8.57			8.70					
1912			9.07			8.47					
1913			9.05			9.01					

TABLE VII.

Leipzig Fund Experience, 1912 and 1913.

	Cases	Cases per 100,000	Average weeks per case	Total disability*	Cumulative totals	
					Cases	Disability in weeks
1 to 3 days	2,289	1,257	.28	352	1,257	352
3 days and 1 week	33,270	18,313	.78	14,284	19,570	14,636
1 to 2 weeks	48,571	26,736	1.5	40,104	46,306	54,740
2 to 3 weeks	29,917	16,468	2.5	41,170	62,774	95,910
3 to 4 weeks	20,539	11,304	3.5	39,564	74,078	135,474
4 to 5 weeks	13,345	7,345	4.5	33,053	81,423	168,526
5 to 6 weeks	7,699	4,237	5.5	23,303	85,660	191,830
6 to 7 weeks	5,554	3,057	6.5	19,921	88,717	211,750
7 to 8 weeks	3,863	2,126	7.5	15,945	90,843	227,695
8 to 9 weeks	2,918	1,606	8.5	13,651	92,449	241,346
9 to 10 weeks	2,338	1,287	9.5	12,226	93,736	253,573
10 to 11 weeks	1,749	963	10.5	10,113	94,699	263,685
11 to 12 weeks	1,429	786	11.5	9,139	95,485	272,824
12 to 13 weeks	1,322	728	12.5	9,100	96,213	281,924
13 to 14 weeks	1,025	564	13.5	7,614	96,777	289,538
14 to 15 weeks	799	440	14.5	6,380	97,217	295,918
15 to 16 weeks	626	345	15.5	5,347	97,562	301,266
16 to 17 weeks	542	298	16.5	4,917	97,860	306,183
17 to 18 weeks	439	242	17.5	4,235	98,102	310,418
18 to 19 weeks	387	213	18.5	3,941	98,315	314,358
19 to 20 weeks	351	193	19.5	3,765	98,508	318,122
20 to 21 weeks	277	152	20.5	3,116	98,660	321,238
21 to 22 weeks	250	138	21.5	2,967	98,798	324,205
22 to 23 weeks	207	114	22.5	2,565	98,912	326,770
23 to 24 weeks	187	103	23.5	2,422	99,015	329,191
24 to 25 weeks	190	105	24.5	2,572	99,120	331,764
25 to 26 weeks	335	179	25.5	4,565	99,299	336,329
Over 26 weeks	1,273	701	26.0	18,226	100,000	354,555
Totals	181,691	100,000		354,555		

*Disability extending beyond 26 weeks weeks disregarded.

TABLE VIII.

Lodge and Union Experience.

Weeks	Cases	Distribution per 100,000 cases	Average weeks	Cost in weeks	Cumulative cases	Total weeks
Under 1 week	683	10,208	.5	5,104	10,208	5,104
1 week	1,202	17,964	1.5	26,946	28,272	32,050
1 to 2 weeks	1,090	16,291	2.5	40,728	44,463	72,778
2 to 3 weeks	813	12,151	3.5	42,528	56,614	115,306
3 to 4 weeks	566	8,459	4.5	38,066	65,073	153,372
4 to 5 weeks	465	6,949	5.5	38,219	72,022	191,591
5 to 6 weeks	333	4,977	6.5	32,350	76,999	223,941
6 to 7 weeks	272	4,065	7.5	30,487	81,064	254,428
7 to 8 weeks	180	2,690	8.5	22,875	83,754	277,303
8 to 9 weeks	169	2,526	9.5	23,997	86,280	301,300
10 to 11 weeks	109	1,630	10.5	17,115	87,910	318,415
11 to 12 weeks	102	1,524	11.5	17,526	89,434	335,941
12 to 13 weeks	89	1,330	12.5	16,625	90,764	352,566
13 to 17 weeks	213	3,183	15.0	47,745	93,947	400,311
17 to 21 weeks	112	1,674	19.0	30,806	95,621	431,117
21 to 26 weeks	74	1,106	23.5	25,991	96,727	457,108
Over 26 weeks	219	3,273	26.0	85,098	100,000	542,206
Totals	6,691	100,000		542,206		

TABLE IX.

	Leipzig		American		Average number of weeks per case		Ratio
	Cases	Weeks	Cases	Weeks	Leipzig	American	
Complete figures	100,000	354,555	100,000	542,206	3.545	5.422	1.54
Taking out 1 week	80,430	339,919	89,792	537,102	4.226	5.982	1.43
Taking out 2 weeks	53,694	299,815	71,828	510,156	5.586	7.102	1.27
Taking out 3 weeks	37,226	258,645	55,537	469,428	6.948	8.452	1.22
Taking out 4 weeks	25,922	219,081	43,386	426,900	8.452	9.839	1.16

TABLE X.

International Labor Unions Maintaining Sick Benefits.

	Actual sick days per member	Adjusted sick days
Bakery and confectionery	5.0	5.2
Barbers	2.1	3.6
Boots and shoes	6.0	8.9
Cigar makers	5.2	7.7
Leather workers	2.6	3.1
Marine firemen	2.3	3.1
Patternmakers	1.9	2.5
Piano and organ workers	1.3	1.7
Plumbers and gas fitters	2.3	4.0
Printers	5.9	5.8

TABLE XI.

Disability Compensated for by the Cigar Makers' Union, 1881-1914.

	Members	Weeks paid for	Average per member
1881	14,604	797	.055
1882	11,430	3,429	.300
1883	13,214	4,450	.337
1884	11,371	6,310	.555
1885	12,000	5,979	.498
1886	24,672	8,445	.342
1887	20,560	13,780	.670
1888	17,301	11,665	.616
1889	18,051	11,904	.654
1890	24,337	12,932	.532
1891	25,178	17,494	.695
1892	27,907	17,980	.645
1893	28,306	20,878	.737
1894	29,325	21,352	.728
1895	29,404	22,513	.766
1896	29,191	21,842	.746
1897	28,206	22,555	.800
1898	28,509	22,256	.781
1899	31,246	21,557	.690
1900	36,539	23,491	.643
1901	36,837	26,922	.736
1902	40,128	27,480	.685
1903	42,906	29,410	.684
1904	45,440	32,645	.718
1905	42,372	31,183	.736
1906	44,078	32,580	.739
1907	46,603	34,710	.745
1908	45,889	36,951	.805
1909	50,322	37,386	.743
1910	50,151	37,887	.755
1911	48,715	40,259	.826
1912	47,219	40,955	.867
1913	47,347	39,370	.832
1914	47,345	41,516	.877

TABLE XIII.

Cost of 100,000 Cases in Weeks.

Maximum limit[1]	No waiting period	Per cent	Waiting period, 3 days	Per cent	Waiting period, 1 week	Per cent	Waiting period, 2 weeks	Per cent
9	309,305	87.24	269,998	76.15	221,147	62.37	160,991	45.40
10	316,213	89.19	276,021	77.85	226,930	64.00	165,649	46.72
11	321,996	90.82	281,429	79.38	231,938	65.45	169,684	47.85
12	327,004	92.23	286,113	80.70	236,089	66.59	173,178	48.84
13	331,155	93.40	289,988	81.79	239,594	67.57	176,207	49.69
14	334,660	94.44	293,277	82.72	242,597	68.42	178,538	50.35
15	337,663	95.23	296,112	83.52	245,208	69.16	180,755	50.98
16	340,274	95.97	298,585	84.22	247,497	69.79	182,724	51.53
17	342,563	96.62	300,757	84.83	249,516	70.37	184,473	52.02
18	344,582	97.19	302,680	85.37	251,307	70.51	186,036	52.47
19	346,373	97.69	304,384	85.84	252,896	71.44	187,421	52.86
20	347,962	98.14	305,898	86.28	254,312	71.72	188,666	53.21
21	349,378	98.54	307,251	86.66	255,583	72.09	189,792	53.52
22	350,639	98.89	308,458	87.00	256,728	72.41	190,801	53.81
23	351,794	99.22	309,568	87.31	257,765	72.70	191,738	54.07
24	352,831	99.52	310,560	87.59	258,698	72.96	192,567	54.31
25	353,764	99.78	311,433	87.84	259,489	73.18	193,216	54.49
26	354,555	100.00	312,185	88.05	260,190	73.39	193,829	54.66

[1] From beginning of sickness.

TABLE XII.

Statistics of American Establishment Sickness Funds.

Occupations	No. of funds	Membership	No. of cases	Cases per 100 men	Actual experience		Days per member	Adjusted experience	
					Days paid for	Days per case		Adjusted days	Days per member
Brass	7	2,461	322	13.1	6,767	2.8	21.0	9,807	4.0
Brewers	6	698	179	25.6	5,305	7.6	29.6	5,635	8.1
Building and construction	7	5,109	1,036	20.3	17,898	3.5	17.3	20,965	4.1
Cereals	4	794	125	15.7	3,497	4.4	28.0	4,866	6.1
Chemicals	13	7,588	2,228	29.4	30,307	4.0	13.6	39,485	5.2
Clothing	4	4,644	635	13.7	13,548	2.9	21.3	26,796	5.8
Electrical apparatus	6	7,339	1,254	17.1	32,321	4.4	25.8	42,622	5.8
Glass, china and earthenware	23	1,981	359	18.1	8,238	4.2	22.9	11,060	5.6
Iron and steel	31	39,673	16,239	40.9	294,765	7.4	18.2	392,154	10.0
Leather	15	2,254	499	22.1	10,768	4.8	21.6	14,151	6.3
Machinery	67	33,622	9,184	27.3	172,082	5.1	18.7	213,850	6.4
Mining, coal	32	77,892	9,982	12.8	278,368	3.6	27.9	297,929	3.8
Mining, metals	7	7,992	1,793	22.4	30,191	3.8	16.8	30,985	3.9
Miscellaneous manufacturing	17	4,766	1,502	31.5	27,396	5.7	18.2	32,715	6.9
Office	4	1,507	270	17.9	6,550	4.3	24.3	7,205	4.8
Paper and pulp	8	3,290	718	21.8	14,809	4.5	20.6	17,559	5.3
Printing	27	3,427	559	16.3	15,773	4.6	28.2	18,657	5.4
Railroad locomotives and cars	18	14,157	5,215	36.8	87,441	6.2	16.8	103,151	7.3
Rubber	5	631	71	11.3	1,595	2.5	22.5	2,445	3.9
Silver and jewelry	8	6,605	1,338	20.3	33,323	5.0	24.9	42,096	6.4
Smelting	2	299	111	37.1	1,451	4.9	13.1	1,892	6.3
Street railroads	26	30,750	5,928	19.3	127,172	4.1	21.5	168,488	5.5
Textile industries	17	3,367	677	20.1	18,954	5.6	28.0	28,922	8.6
Transportation and express	5	2,544	594	23.3	12,675	5.0	21.3	14,694	5.8
Vehicles	7	2,126	416	19.6	8,149	3.8	19.6	11,296	5.3
Wood and furniture	26	7,557	1,635	21.6	26,615	3.5	16.3	32,333	4.3
Totals	415	302,584	69,605	23.0	1,425,488	4.7	20.5	1,752,827	5.8

SECTION IV.

COST OF MEDICAL AID.

An effort to arrive at a sound estimate of the probable cost of medical aid is even more difficult than in the case of the cost of cash benefits. In the study of the cost of accident compensation preliminary to adoption of the law, this was also found to be a problem of greatest uncertainty. In the case of cash benefits only the quantity of disability to be paid for has to be estimated. The rate of benefit payments is defined by the provisions of the proposed act.

When we turn to the problem of medical aid, both the amount of service to be granted and the rate of remuneration are uncertain.

It is very difficult, almost impossible, to arrive at a reasonable estimate of the amount of medical aid which will be required. Roughly, it may perhaps be assumed that it will bear the same proportion to the amount required under the various European systems, as does the assumed sick rate to that found in these systems. Even that, however, does not solve the problem, because statistics of the various health insurance systems in Europe are usually limited to recording the cost of medical service, and not the amount rendered. Only for one large German sick insurance fund, namely, that of the city of Leipzig, were some data available in regard to the amount of medical work to the commission.

Even if these data be assumed to be applicable to California the complex question of remuneration remains. The various methods by which medical service may be compensated under a health insurance act, are discussed at length elsewhere in this report. In a general way all the existing systems may be divided into two groups according to whether payments are made on a certain fee schedule per visit, or other unit of work, or whether the payments are computed on capitation basis, that is a specified amount per annum per each person insured. As explained elsewhere more fully, the latter system does not necessarily mean that the individual physician is paid on a capitation basis, but only that the cost to the insurance carrier is computed on that basis. If the visitation system should prevail, an estimate would be required in advance to gauge how much the cost of the visits would amount to. If, however, the latter system of capitation should prevail, what is wanted is not so much an estimate, as a decision as to how much should be paid per capita. Evidently the problem is considerably simplified under a capitation method, the consensus of European opinion being against a

visitation system on a fee schedule. An effort must be made at this time to determine what a proper capitation charge may be. Naturally, no such amount can or should be written into the law.

After all, a decision as to the rate at which the services of some 6,000 physicians in the state of California may be purchased should not be arrived at without negotiations with the profession concerned. An estimate made here can not have, therefore, any binding value, but must be taken for what it is worth, as only an approximate computation, subject to various modifications, after the system has been legislated for. Nevertheless, it is worth while presenting various data which may throw some light upon the subject.

Great Britain. The experience of the British system with the question of cost of medical aid is well known. The original estimates provided 4s 6d per capita for medical aid, and 1s 6d for drugs. The amount, in the opinion of the medical profession, was decided to be insufficient, and the British Medical Association made a claim for a minimum capitation fee of 8s 6d. After various negotiations, which at the time reached a very acute stage, a total of 7s ($1.68) was determined upon with a possible additional 6d per head, or as much of it as was not found necessary for additional expenditure on drugs. The total fee for physicians, therefore, varies from $1.68 to $1.80 per capita.

Germany. The arrangements for remuneration of medical aid in Germany are subject to numerous local variations. The average cost per capita for various periods is shown in the following table for various forms of insurance carriers. (A description of which is given in Chapter V of this report.)

	Commercial funds	Local funds	Establishment funds	Building funds	Guild funds	Regular aid funds	State aid funds	All funds
1888	$0 47	$0 51	$0 89	$0 85	$0 41	$0 17	$0 20	$0 55
1893	56	64	1 04	1 21	55	55	52	72
1898	58	71	1 12	1 38	67	68	61	79
1903	67	88	1 31	1 99	84	79	75	95
1908	92	1 21	1 76	1 66	1 14	1 10	95	1 31
1912	-------	1 43	-------	-------	-------	-------	-------	1 54

The average for all funds, as well as the average cost for almost every form of organization is found to have been constantly increasing during the last 25 years, the general average being increased from 55 cents per capita in 1888 to 1.31 in 1908, and $1.54 in 1912.

Austria. The same tendency towards the increase of the cost of medical aid has been observed in Austria. Both the actual amount and the rate of increase have been somewhat slower than in Germany, as the following figures may indicate:

1890	$0 47	1905	$0 65
1895	51	1907	70
1900	58	1912	----

Leipzig. Since the data for Leipzig are available in greatest detail, it is useful to examine those somewhat more carefully. The average cost per capita for the Leipzig sick insurance fund increased as follows:

1888	$0 87	1903	$1 45
1893	1 05	1908	2 00
1898	1 25	1912	2 16

These averages include the general per capita as well as certain additional payments for extra services. The actual per capita charges as determined by the rules of the fund since its organization on January 1, 1887, were as follows:

January	1, 1887	3.00 marks	($0 70)	October 1, 1898	4.50 marks ($1 05)
January	1, 1888	3.30 marks	(77)	May 7, 1904	5.00 marks (1 17)
October	1, 1888	3.60 marks	(84)	May 1, 1905	6.50 marks (1 52)
July	1, 1896	3.90 marks	(91)	January 1, 1911	7.25 marks (1 70)
October	1, 1897	4.20 marks	(98)		

All these rates were per number, which included medical aid to dependents—no difference being made in charge between single persons and members having dependent families. The one exception to this statement is the rate of 5 marks, or $1.17, which prevailed for a short period of less than a year, from May 7, 1904, to May 1, 1905. The method by which this increase in rates has been accomplished need not be gone into at this place. The additional charge for medical aid for such special services as obstetrical work, consultations, dental charges and payments to physicians in localities outside of Leipzig for the benefit of the members of the Leipzig fund, amounted, in 1910, to about 30 per cent over and above the regular charge.

As to the amount of medical aid rendered, the following information is interesting:

Year	Average membership	*Units of medical service rendered by regular physician
1906	158,702	1,062,677
1907	162,489	1,517,196
1908	165,659	1,594,412
1909	172,617	1,669,689
1910	182,898	1,806,257
Totals	842,365	7,650,231

*This does not include any services for which special compensation was paid.

The average number of units of medical service per member per annum, including the dependent family (which, under the rules of the Leipzig fund included consorts, children, parents, grandchildren and parents-in-law), equals nine. It has shown a slight tendency to increase, and during 1910 was nearer ten per annum. Whereas, the report quoted indicates that of the total number of cases treated, the members of families claimed, during the three years, 1908 to 1910, about 47 per cent. So that roughly, the medical work done is divided equally between members and their families.

Furthermore, the fact must be noticed that of the total number of units of service rendered to the members themselves, 82 per cent consists of ordinary office visits, while of units of service rendered to the members of the families only 60 per cent consisted of ordinary office visits. So that on the whole it seems evident that more than one-half of the medical aid rendered by the Leipzig fund was on account of members of families, and the average number of units of medical service rendered to members must fluctuate somewhere between four and five per annum.

The average remuneration for a unit of medical service, exclusive of special services already mentioned in 1910, was about .62 marks, or 15 cents. **In the light of these figures it seemed reasonable for a preliminary estimate, for California, to use the figure $4.00 per annum as per capita charge for medical aid only, exclusive of hospital or drugs for service of individual persons. The cost to the insurance carriers in case the medical aid is extended to families would be $4.00 a week per each member of the family entitled to medical aid. This amount is more than twice as large as the amount granted by the British insurance system. It is practically four times as large as the amount paid by the Leipzig insurance fund.**

Additional support in favor of such a preliminary is found in various sources of actual experience in California.

The Industrial Accident Commission reports that the average cost of medical aid per case is about $20.00, and the average duration of the case is 20 days, making the total cost of medical aid, including hospital and drugs, etc., about $1.00 per day of disability. An allowance of $4.00 per annum for medical aid alone, with an additional allowance as explained later, of about $2.00 for hospital care and $2.00 for drugs, produce a total of $8.00 for six days of disability, which is larger than that offered by the Industrial Accident Board under its recognized schedule.

It is known that various cooperative hospital associations are able to give all medical and hospital aid and drugs at a rate of $1.00 a month, out of which a considerable amount is spent for charitable aid and for general expenses. It is also known that commercial hospital associations offer to furnish medical and hospital aid and drugs at the rate of $1.00 per month, of which the expenses and profits consume probably more than one-half.

The Infirmary of the University of California is able to furnish both medical and hospital aid at the rate of $6.00 per annum, or perhaps more accurately, for nine months of the year. It is admitted that the system on the whole is self-supporting, and it must be considered that this infirmary is doing an enormous amount of work in routine examinations, which an ordinary insurance system at least in the beginning will not be called upon to perform.

It is easy to increase the estimate per capita cost to a higher figure, say to $5.00 or $6.00 in arriving at final cost.

SECTION V.

COST OF HOSPITAL CARE AND DRUGS.

The necessity for assumptions indicated above in connection with the payment of physicians' services, also applies to some extent to other branches of medical aid.

It is usually assumed that sufficient hospital facilities for any community must provide from four to five beds for one thousand population. A full utilization of such facilities would give about 1.5 to 1.8 hospital days per capita per annum. As a matter of fact, such an absolute utilization of facilities provided is practically impossible. Such statistics as are available seem to corroborate this conclusion. Thus the experience of Hungary for about ten years, 1897 to 1906, indicates a total exposure of 6,706,000 years with 5,350,000 hospital days, or about eight-tenths of a day per insured. The experience of the Leipzig Fund is here again perhaps more indicative. Taking the nine-year period from 1902 to 1910 with an exposure of 1,407,000 years, the number of hospital and institutional days granted to sick members was 1,735,000, or 1.23 days per person. This ratio, however, has been gradually increasing, and in 1902, after some fifteen years of experience, the average number of sick days was only one per person, and by 1910 it has risen to 1.38. This includes, in addition to hospitals proper, various institutions for convalescents.

It is perhaps worth while to point out that the experience of the University of California Infirmary with the admitted effort to get all illness of even moderate severity into the infirmary, the average number of hospital days per person is less than one-half. **It would seem safe, therefore, to assume provisionally, an average hospital rate of one day per insured.**

Though a health insurance system may undertake building its own hospitals and institutions, it is nevertheless necessary, at least in the beginning, to take into consideration existing commercial rates for hospital services, especially in the state of California, where the free hospital facilities are admittedly insufficient.

Hospital rates are subject to great variations, in accordance with facilities and accommodations provided, but ordinary ward beds may be obtained from about $15 to $17.50 a week, and it is reasonable to assume that the health insurance carrier, with its large demand for hospital space will be given the best rates obtainable, and in the final computations the cost of each hospital day was assumed to be $2.00.

Drugs and Supplies.

The retail price of drugs is so far above the actual value that it is difficult to arrive at any conclusions as to the proper cost of the drugs and supplies benefit from present experiences. European data indicate quite uniformly that the drug and supply benefit costs about the same as the hospital benefit. In Germany the average cost of drugs and supplies per member has increased from 44 cents in 1888 to 60 cents in 1898, 83 cents in 1908.

The provisions of the Leipzig fund in regard to drugs are extremely liberal, and the average cost has increased from 55 cents in 1888 to $1.09 in 1912.

Undoubtedly those drugs and similar articles are cheaper in Germany than they are in this country, but since we are dealing here with material rather than services, the difference in cost could not be very great, and **it is felt that by doubling the amount spent in Leipzig, or assigning $2.00 per capita for drugs, sufficient provision is made.**

Dental Aid.

So little has been accomplished in systematic dental provision that scarcely any material exists for an estimate of the cost of the dental benefit. It evidently would be impossible in the very beginning to grade free dental aid of the expensive kind requiring expensive treatment. **An arbitrary assumption of $1.00 per capita has been made which is thought sufficient to provide a fund out of which the hygienic care of the teeth may be given to the insured,** including such methods of aid as extracting, cleaning, treatment and possibly inexpensive fillings.

SECTION VI.

COMPUTATION OF COST.

In table I on pages 329-332 an effort was made to compute the probable cost of the entire insurance system for the eighteen large occupational groups. Such a computation may be made, either in dollars and cents, or in percentage of the wage exposure. The cash computation has been selected because its results are more readily understood. In any case it is necessary to take the wage exposure into consideration, because, while some benefits will be payable on a per capita basis, others must be computed in relation to wages. Throughout the table the assumption has been made, which is of course not in accordance with actual facts, that there are 52 weeks of employment for every person. This was done in order to compute the cost of 52 weeks of insurance. The final proportion obtained between the total cost for a full year's insurance and a full year's wage exposure will of course hold true for any part of the year or for a single week. The methods of arriving at the cost of various items must be stated here in detail:

1. *Weekly cash benefit.* Assuming rate of sickness six days per annum, cash benefit is equal to 6/7 x 2/3 of week's wage, or .5714 of a week's wage equals .5714 of annual wage—1.099 per cent of annual wage.

This percentage must be applied, not to the actual but to the adjusted wage, because the maximum benefit has been placed at $15.00.

2. *Maternity benefit to female wage workers.* Birth rate in California is equal to 16.4 per 1,000 population.

Since married women constitute 17.6 per cent of total population, therefore the annual birthrate among married women equals

$$16.4 \div .176 = 93 \text{ per } 1{,}000 \text{ married women.}$$

Married women constitute about 15 per cent of all employed women in California; therefore rate of issue for all employed women equals

$$93 \times .15 = 14 \text{ per } 1{,}000 \text{ employed women.}$$

Assuming the benefits for maternity to equal 2/3 of the wages during eight weeks, the benefit in cash per 1,000 women equals

$$.667 \text{ week's wages} \times 8 \times 14 = 74.7 \text{ weeks' wages.}$$

Full exposure for 1,000 employees being 52,000 weeks' wages at cost in proportion to exposure is $74.7 \div 52{,}000$ weeks $= .144$ per cent.

Medical aid, including nursing in maternity, may be estimated at an average of about $25.00 per case.

Cost per female employee would be equal to $\$25.00 \times 14 \div 1{,}000 = 35$ cents.

3. *Funeral benefit.* Assuming value of benefit $50.00 per funeral, the following computation of the mortality rate among employees is based upon the data of the United States census for persons employed, and the California State Board of Health for the number of deaths:

	Male	Female
Number employed in 1910	932,752	174,916
Add 12 per cent for increase, 1910–1913	111,930	20,990
Totals in 1913	1,044,682	195,906
Number of deaths in 1913 among occupied persons	17,045	1,186
Death rate	16.3	6.1

The considerable difference in the death rate between men and women is easily explained by the great difference in age distribution, most women not remaining permanently in their occupations.

Cost of funeral benefit per one male insured person—

$$\$50.00 \times 16.3 \div 1{,}000 = \$.815.$$

Cost of funeral for one female person—

$$\$50.00 \times 6.1 \div 1{,}000 = \$.305.$$

4. *Medical service.* Computations have been made under the assumption of average cost of $4.00 and also $6.00 per capita.

5. *Hospital benefit.* Assumption of cost, $2.00 per capita as explained above (see page 319).

A substantial saving must be taken into consideration as against this cost.

In a case of a single person who is being taken care of in a hospital and receives maintenance in addition to medical aid, there is need for little if any financial assistance.

In a case of a married person the support needed by the family is reduced, as the sick person is taken care of in the hospital.

In the following computation of expected saving on this account, the assumption has been made that in case of a single person there will be no cash benefit, and in the case of persons with dependents one-half of the cash benefit will be paid.

Statistics of occupations in California indicate the following distribution:

Marital condition	Male	Female
Single	476	655
Married or widowed	524	345
Totals	1,000	1,000

Saving for every single person, in percentage of adjusted wage—

$$1/7 \times 2/3 \times 1/52 = .183 \text{ per cent.}$$

Saving for every married person—

$$1/7 \times 2/3 \times 1/52 \times 1/2 = .092 \text{ per cent.}$$

Saving for 1,000 male persons—

476 single	$476 \times .183 =$	87.108 per cent
524 married	$524 \times .092 =$	47.208 per cent
Saving for 1,000 persons		134.316 per cent
Saving for each male insured person		.134 per cent

Saving for 1,000 female persons—

655 single	$655 \times .183 =$	119.865 per cent
345 married and widowed	$345 \times .092 =$	31.740 per cent
Saving of 1,000 women		151.605 per cent
Saving per each insured woman		.152 per cent

6. *Drug benefit.* Assumed cost $2.00 per capita. (See page 319.)
7. *Dental benefit.* Assumed cost, $1.00 per capita.
8. *Tuberculosis benefit.* Additional 26 weeks after the expiration of the first 26 weeks. Basis of computation used, mortality from tuberculosis in California during 1913:

	Male	Female	Total
Persons employed, 1910	932,752	174,916	1,107,668
Add 12 per cent for 1913	111,930	20,990	132,920
Totals	1,044,682	195,906	1,240,588
Tuberculosis deaths among employed persons	2,936	204	3,140
Death rate from tuberculosis	2.8	1.1	2.5

From the tuberculosis death rate an assumption of the tuberculosis sick rate has to be made. The experience of Leipzig of some twenty years indicates about three cases of tuberculosis treated for every case of death from the disease. The California Tuberculosis Commission has made an estimate of four cases for each death, on an assumption that an average case lasts about four years. This higher ratio of four was accepted to be on the safe side, producing the following rate of tuberculosis per 1,000 population:

Males, 11.2 per cent; females, 4.4 per cent; both sexes, 10 per cent.

Considering that the maximum benefit for tuberculosis may extend to 52 weeks, it does not follow that every case will demand the full time. The average duration of treatment per case under the Leipzig system was under 90 days. It seems sufficient, therefore, to allow the full 26 weeks for about one-half of the cases, or 13 weeks of sanatorium treatment over and above the 26 weeks for each case.

It is assumed this tuberculosis benefit is to be given in the form of sanatorium treatment and the cost would be without any reference to the wages of the insured. The cost is assumed to be $2.00 per day, $14.00 per week, or $182.00 per average case. The cost per 1,000 employees of either sex would therefore be as follows:

Male ..... $182.00 × 11.2 = $2,038 40
Female ..... 182.00 × 4.4 = 800 80

The cost per insured member will then equal $2.04 for males and 80 cents for females.

9. *Medical benefit for family.* The number of children per family may be roughly estimated on the following basis:

Children under 17 in California in 1910 641,813
Married, widowed, or divorced men 552,745
Average number of children per family 1.2

Members of family who would be entitled to benefit (limiting this to wives and children only), is shown in the following table, both for males and females:

	For every 1,000 men employed	Additional persons per family	Total additional persons
Married	476	2.2	1,047
Single	476	----------	----------
Widowed and divorced	48	1.2	58
Totals	1,000	----------	1,105

	For every 1,000 women employed	Additional persons per family	Total additional persons
Married	139	1.2	167
Single	654		
Widowed or divorced	207	1.2	248
Totals	1,000		415

At the rate of $4.00 per capita for medical aid the cost of this benefit would be:
For each male insured $4.00 × 1.105 = $4 42
For each female insured 4.00 × .415 = 1 66
At the rate of $6.00 for medical aid the cost would be:
For each male insured $6.00 × 1.105 = $6 63
For each female insured 6.00 × .415 = 2 49

10. *Hospital benefit to dependents.* At the rate of $2.00 per capita would be:
For males $2.00 × 1.105 = $2.21
Females 2.00 × .415 = 83

11. *Funeral benefit to dependents.* Cost per funeral, $50.00. General death rate for California, 14.4.

	Male	Female
Death rate for 1,000 dependents	14.4	14.4
Number of deaths among dependents per 1,000 insured	15.9	6.0
Number of dependents per 1,000 members	1,105	415
Funeral cost per 1,000	$795	$300
Funeral cost per one insured	$0.795	$0.30

12. *Maternity benefit to dependents:*
Married men to 1,000 employed men, 476.
Assumed rate of issue for 1,000 married men, 93.
Number of births per 1,000 insured men, 93 × .476 = 44.3.
Average cost per case, $25.00.
Cost per 1,000 insured men, $25.00 × 44.3 = $1107.50.
Cost per insured male member, $1.11.

13. *Saving possible through establishment of one week waiting period:*
A computation made on the basis of the Leipzig standard table given on page 310, indicates that an establishment of one week waiting period would reduce the cost of the money benefit by 25 per cent. The saving accomplished will therefore be:
1.099 per cent × .25 = .275 per cent on a basis of adjusted wages.

In the following tables the various formulas worked out in the preceding pages are utilized for computation of the total cost as well as per capita cost and proportion to pay roll:

TABLE I: Pages 329-332 present a computation of the net cost of all the benefits for each of the eighteen occupational groups. This statement contains no loading for expenses. On the other hand it assumes that every one of the million persons who might be subject to compulsory insurance is fully covered throughout the entire fifty-two weeks of the year. The cost of medical aid was assumed at $4.00 per capita in this table, but a separate parallel computation was made on the assumption of $6.00 for medical aid. Briefly, the final results of this

table show that taking in all the groups of wage workers, the net cost including the benefits for the insured, as well as a fairly comprehensive scheme of medical benefits for the family will amount to $24,836,000, and without the benefit to the family, $17,332,000. On an assumption of $6.00 per capita for medical aid the total would be $28,780,000 including the family, and $19,322,000 not including the family. These figures must not be quoted without many qualifications. The total amount will evidently vary substantially under the influence of the following factors:

First—Whether all the wageworkers are covered or for any reason certain groups are excluded. Such exclusions are possible for agricultural labor, domestic labor, labor engaged in interstate commerce, professional occupations, etc.

Second—Whether all the benefits are included or any are left out in the beginning. All together eight different benefits for the insured and four for the members of the family are recognized.

Third—Whether the cost of the various benefits will vary from the assumptions made in this computation.

Fourth—The effect of variations in cost of medical aid was taken into consideration because it is the biggest factor, but there may be others of similar character.

Fifth—How far all the wageworkers covered by the law will keep up the insurance throughout the year.

With these five factors influencing the final figure of cost thousands of different combinations might be made. It would be almost impossible to make in advance independent computations for all the various combinations that might result, but a general idea as to the cost can be obtained from these figures, and any further combinations may be made from them without very much difficulty.

It will be observed that certain assumptions were made uniformily for all the eighteen groups of wage earners, as for instance in regard to mortality, marital conditions, etc. Undoubtedly the criticism would be justified that there are substantial variations in these conditions between one group and the other, but for the purpose of preliminary estimate such refinement did not appear necessary. On the whole the table presents a general idea as to the total cost of insuring each one of these groups.

While it did not seem necessary to account for all possible variations there seems to be a general agreement that certain benefits are essential and others somewhat less so. There may be some doubt about a dental benefit, or the additional benefit for tuberculosis, and there is also a general desire to ascertain the additional cost which insurance of the

family will necessitate. The various computations were made on the following hypotheses:

(*a*) All benefits, including those of the family.
(*b*) All benefits, including those for the family, but no dental benefit to the insured.
(*c*) All benefits, including those for the family, but no additional tional tuberculosis benefit to the insured.
(*d*) All benefits, including those for the family, exclusive of both the dental and tuberculosis benefit to the insured.
(*e*) All benefits to the insured but none to the family.
(*f*) All benefits to the insured except dental, and none to the family.
(*g*) All benefits to the insured except additional tuberculosis benefit, and none to the family.
(*h*) All benefits to the insured except tuberculosis and dental benefits, and none to the family.

Computations were made for all these eight combinations, and both the assumption of $4.00 and the assumption of $6.00 per capita for medical aid, were used.

The various combinations present a variation from $14,651,000 to $28,780,000. (Table II.)

In this table, as well as in all others, the figures are given separately for the four large occupational groups.

TABLE III indicates the average net cost per member per annum. Using as a basis both the $4.00 assumption and the $6.00 assumption, there was a fluctuation between $14.72 and $28.92 per member for the eight different combinations. These general averages are applicable when all the wage groups together are taken. Because of wage and other fluctuations the averages differ somewhat between one occupational group and others. Great care should be taken in accepting these averages as indications of actual rates to be quoted, for as shown elsewhere, these rates should be made a factor of wages and not a uniform amount for each wage earner.

TABLE IV gives the same data of net cost per week, obtained by a simple arithmetical division of figures in Table III by 52. The indicated variations are between 28 cents and 56 cents per week. It is necessary to remember in connection with this table that it contains no loading for expenses, and that in order to produce full coverage for the year amounts would require fifty-two payments throughout the year.

TABLE V presents the same data of net cost (without any loading) in percentage of wages. Taking all the occupational groups together the fluctuation is between 1.64 per cent and 3.23 per cent, depending upon the benefit included and the cost of the same. Limiting ourselves to the figures, of an assumed medical cost of $4.00 per capita,

the fluctuation is between 1.64 and 2.79. Considerable fluctuation may be observed in this percentage cost between different occupational groups. It is evident that since only the case benefits are in proportion to wages and all the medical and other services are flat charges, that the cost in percentage of wages will be higher if wages are lower. It follows that the percentage cost for domestic labor and agricultural labor will be higher than for manufacturing, etc. It does not follow that similar differences must be observed when the contributions are computed. The table is not a computation of the probable charges, but only computations of the probable cost.

It is obvious that in order to keep the insurance carrier solvent no insurance can be granted without the proper collection of necessary funds. The average weekly cost will only give a week of insurance, and it would be necessary to collect fifty-two weeks' premiums in order to give complete coverage. Manifestly such a rigid rule might play considerable havoc with the original system, as employees are shifting from one employer to another, and as brief periods of unemployment may arise even in the case of the most fortunate wageworkers. In addition to this the problem of insurance during the period of more prolonged unemployment is also a very serious one.

As explained somewhere else, it is necessary to grant some period of extending insurance, for at least two reasons:

First—To prevent a lapse of insurance as a result of pure negligence on the wageworker's part to meet the weekly cost out of his own fund and on his own initiative as soon as he becomes separated from his employment.

Second—To make some provision for those occupations in which more or less prolonged periods of unemployment constitute a normal feature of the occupation.

Both results can be achieved by granting the privilege of extended insurance as a percentage relation to the length of paid up insurance. While material on distribution of unemployment is very fragmentary, a study of such data as are available seems to indicate that it is possible to grant an extension of 20 per cent, or one week of insurance for every five weeks of paid up insurance within any one year by a loading of 7½ per cent.

TABLE VI presents the average weekly cost with such a loading of 7½ per cent for arrears.

TABLE VII shows the effect of the same loading in terms of percentage of wages.

All the computations up to this point have been on a net basis, without any loading for cost of administration. Naturally it is impossible to make a very close estimate of the probable cost of administration. It has been assumed that since the Leipzig Fund

runs at a cost of about 8 per cent, that 10 per cent of the gross, representing about 11.1 per cent of the net (1÷.9=11.1 per cent), will be an ample loading for expenses.

The inclusion or exclusion of the family benefit will affect not only the net cost of services rendered and benefits paid, but also the cost of administration. On the other hand it seems safer to assume, in view of the fact that the Leipzig average cost of administration is based upon a very comprehensive service, that the exclusion of one or two benefits, such as the dental and the tuberculosis benefits, will not very materially reduce the cost of administration. Therefore, the same loading for expenses representing 11.1 per cent of the net cost of all benefits applies, whether the dental or tuberculosis benefits or both be omitted. Moreover if it should appear necessary to increase the cost of medical aid beyond $4.00, that should not in any way affect the cost of the administration. Therefore, the loadings obtained on a basis of $4.00 for medical aid were also used in the computation under the assumption of $6.00 for medical aid. In short, the loading for expenses was assumed to be as follows:

Occupational group	Loading for expenses	
	Inclusive of family	Exclusive of family
Manufacturing, mining, etc.	$1,386,000	$956,000
Commerce and clerical occupations	612,000	438,000
Professional and public service	149,000	113,000
Domestic and agricultural	613,000	418,000
All occupations	$2,760,000	$1,926,000

From these figures the following tables are derived showing the average cost per annum per capita. (Table VII). The average cost per week per capita (Table IX), and the cost expressed in percentage of wages (Table X) inclusive of the 7½ per cent loading for arrears and 10 per cent loading for administration, are shown in the following pages.

Limiting ourselves to the estimate based upon an assumption of $4.00 for medical aid, it appears that the cost for all benefits outlined in this chapter with a loading for arrears covering the cost of an additional week of free insurance for every five weeks of paid up insurance, and with a very liberal estimate for administration, does not exceed three and one-third per cent, and that the cost may be reduced by eliminating some of the benefits. It is extremely significant that all these complicated computaitons simply corroborate the experience of the most efficient funds in Germany for which the cost has been recently running between 3 and 4 per cent.

TABLES OF ESTIMATES.

The following tables, (with the exception of Table I which shows the cost for no waiting period and for a waiting period of one week), are computed on a basis of one week waiting period.

The tables are estimates of the cost of a Health Insurance system giving the following benefits:

I. A cash benefit of two-thirds wages for periods of disability due to sickness, not to exceed twenty-six weeks in each fifty-two weeks of insurance.

II. Medical and hospital care for the insured and his dependent family, as well as very limited dental care.

III. Drugs for the insured.

IV. A small funeral benefit at the death of the insured of from $50 to $100.

V. A special maternity benefit for the wife of the insured wage earner and for the woman wage earner.

VI. A special tuberculosis benefit for the insured, consisting of twenty-six weeks additional sanatorium care.

TABLE I.

Computation of the Net Cost of All the Benefits for Each of the Occupational Groups (No Loading for Expenses).

Kind of benefit	Manufacturing		Building	Mining and transportation		
	Manufacturing, male	Manufacturing, female		Mining	Transportation	Totals
Insured persons—						
1. Weekly cash	$1,630,000	$138,000	$1,748,000	$321,000	$1,031,000	$4,838,000
2. Maternity:						
Cash		18,000				18,000
Obstetrics		9,000				9,000
3. Funeral	135,000	8,000	113,000	29,000	86,000	371,000
4. Medical	664,000	100,000	556,000	144,000	420,000	1,884,000
5. Hospital	332,000	50,000	278,000	72,000	210,000	942,000
6. Drug	332,000	50,000	278,000	72,000	210,000	942,000
7. Dental	166,000	25,000	139,000	36,000	105,000	471,000
8. Tuberculosis	339,000	20,000	284,000	73,000	214,000	930,000
Totals	$3,568,000	$418,000	$3,396,000	$747,000	$2,276,000	$10,405,000
Deduct—						
Cash for hospital days	$195,000	$19,000	$213,000	$39,000	$126,000	$592,000
First week's cash	400,000	35,000	437,000	80,000	258,000	1,210,000
Total deductions	$595,000	$54,000	$650,000	$119,000	$384,000	$1,802,000
Net cost (insured)	$2,973,000	$364,000	$2,746,000	$628,000	$1,892,000	$8,603,000
Family—						
1. Medical	$734,000	$42,000	$614,000	$155,000	$464,000	$2,009,000
2. Hospital	367,000	21,000	307,000	77,000	232,000	1,004,000
3. Funeral	133,000	8,000	111,000	28,000	84,000	364,000
4. Maternity	184,000		154,000	39,000	117,000	494,000
Total family	$1,418,000	$71,000	$1,186,000	$299,000	$897,000	$3,871,000
Total cost	$4,391,000	$435,000	$3,932,000	$927,000	$2,789,000	$12,474,000
Total cost, if medical $6—						
With family	$5,089,000	$505,000	$4,518,000	$1,076,000	$3,231,000	$14,419,000
Without family	3,305,000	414,000	3,024,000	700,000	2,102,000	9,545,000

TABLE I—Continued.

Commercial and Clerical Employment.

Kind of benefit	Commercial, male	Commercial, female	Clerical, male	Clerical, female	Totals
Insured persons—					
1. Weekly cash	$1,151,000	$174,000	$544,000	$218,000	$2,087,000
2. Maternity:					
Cash	----------	23,000	----------	28,000	51,000
Obstetrics	----------	10,000	----------	12,000	22,000
3. Funeral	86,000	9,000	46,000	11,000	152,000
4. Medical	424,000	116,000	224,000	140,000	904,000
5. Hospital	212,000	58,000	112,000	70,000	452,000
6. Drugs, etc.	212,000	58,000	112,000	70,000	452,000
7. Dental	106,000	29,000	56,000	35,000	226,000
8. Tuberculosis	216,000	23,000	114,000	28,000	381,000
Totals	$2,407,000	$500,000	$1,208,000	$612,000	$4,727,000
Deduct—					
Cash for hospital days	$140,000	$25,000	$66,000	$30,000	$261,000
First week's cash	288,000	44,000	136,000	54,000	522,000
Total deductions	$428,000	$69,000	$202,000	$84,000	$783,000
Net cost (insured)	$1,979,000	$431,000	$1,006,000	$528,000	$3,944,000
Family—					
1. Medical	$468,000	$48,000	$248,000	$56,000	$822,000
2. Hospital	234,000	24,000	124,000	29,000	411,000
3. Funeral	85,000	9,000	45,000	10,000	149,000
4. Maternity	118,000	----------	62,000	----------	180,000
Totals	$905,000	$81,000	$479,000	$97,000	$1,562,000
Total cost	$2,884,000	$512,000	$1,485,000	$625,000	$5,506,000
Total cost of medical $6—					
With family	$3,330,000	$594,000	$1,721,000	$724,000	$6,369,000
Without family	2,191,000	489,000	1,118,000	598,000	4,396,000

TABLE I—Continued.

Domestic Service, Agriculture and Miscellaneous.

Kind of benefit	Domestic, male	Domestic, female	Agricultural, male	Agricultural, female	Miscellaneous, male	Miscellaneous, female	Totals
Insured persons—							
1. Weekly benefit	$219,000	$309,000	$908,000	$11,000	$207,000	$14,000	$1,668,000
2. Maternity:							
Cash	----------	40,000	----------	1,000	----------	2,000	43,000
Obstetrics	----------	19,000	----------	1,000	----------	1,000	21,000
3. Funeral	26,000	16,000	110,000	1,000	15,000	1,000	169,000
4. Medical	128,000	216,000	540,000	8,000	76,000	8,000	976,000
5. Hospital	64,000	108,000	270,000	4,000	38,000	4,000	488,000
6. Drugs	64,000	108,000	270,000	4,000	38,000	4,000	488,000
7. Dental	32,000	54,000	135,000	2,000	19,000	2,000	244,000
8. Tuberculosis	65,000	43,000	140,000	4,000	39,000	4,000	295,000
Totals	$598,000	$913,000	$2,373,000	$36,000	$432,000	$40,000	$4,392,000
Deduct—							
Cash for hospital	$27,000	$43,000	$111,000	$2,000	$25,000	$2,000	$210,000
First week's cash	55,000	77,000	227,000	3,000	52,000	3,000	417,000
Total deductions	$82,000	$120,000	$338,000	$5,000	$77,000	$5,000	$627,000
Net cash (insured)	$516,000	$793,000	$2,035,000	$31,000	$355,000	$35,000	$3,765,000
Family—							
1. Medical	$142,000	$90,000	$596,000	$3,000	$84,000	$3,000	$918,000
2. Hospital	71,000	45,000	298,000	2,000	42,000	2,000	460,000
3. Funeral	26,000	16,000	108,000	1,000	15,000	1,000	167,000
4. Maternity	36,000	----------	150,000	----------	21,000	----------	207,000
Total (family)	$275,000	$151,000	$1,152,000	$6,000	$162,000	$6,000	$1,752,000
Total cost	$791,000	$944,000	$3,187,000	$37,000	$517,000	$41,000	$5,517,000
Total cost (medical $6):							
With family	$925,000	$1,097,000	$3,754,000	$42,000	$597,000	$46,000	$6,460,000
Without family	580,000	901,000	2,305,000	35,000	393,000	39,000	4,253,000

TABLE I—Continued.

Kind of benefit	Manufacturing, building, mining, transportation	Commercial, clerical	Professional, public service	Domestic, agricultural, miscellaneous	Totals
Insured persons—					
1. Weekly benefit	$4,838,000	$2,087,000	$605,000	$1,668,000	$9,198,000
2. Maternity:					
Cash	18,000	51,000	36,000	43,000	148,000
Obstetrics	9,000	22,000	12,000	21,000	64,000
3. Funeral	371,000	152,000	31,000	169,000	723,000
4. Medical	1,886,000	904,000	216,000	976,000	3,980,000
5. Hospital	942,000	452,000	108,000	488,000	1,990,000
6. Drugs	942,000	452,000	108,000	488,000	1,990,000
7. Dental	471,000	226,000	54,000	244,000	995,000
8. Tuberculosis	93,000	381,000	80,000	295,000	1,686,000
Totals	$10,405,000	$4,727,000	$1,250,000	$4,392,000	$20,774,000
Deduct—					
Cost for hospital	$592,000	$261,000	$79,000	$210,000	$1,142,000
First week's cash	1,210,000	522,000	151,000	417,000	2,300,000
Total deduction	$1,802,000	$783,000	$230,000	$627,000	$3,442,000
Net (insured)	$8,603,000	$3,944,000	$1,020,000	$3,765,000	$17,332,000
Family—					
1. Medical	$2,009,000	$822,000	$170,000	$918,000	$3,919,000
2. Hospital	1,004,000	411,000	85,000	460,000	1,960,000
3. Funeral	364,000	149,000	31,000	167,000	711,000
4. Maternity	494,000	180,000	33,000	207,000	914,000
Totals (family)	$3,871,000	$1,562,000	$319,000	$1,752,000	$7,504,000
Total cost	$12,474,000	$5,506,000	$1,339,000	$5,517,000	$24,836,000
Cost (Medical $6)—					
With family	$14,419,000	$6,369,000	$1,532,000	$6,460,000	$28,780,000
Without family	9,547,000	4,396,000	1,128,000	4,253,000	19,322,000

TABLE II.

Net Cost of Insurance Under Various Assumptions.

Kind of benefit	Manfg., mining, building, transp.	Commercial, clerical	Professional and public service	Domestic and agricultural	All groups
Medical at $6—					
Inclusive of family:					
All benefits	$14,419,000	$6,369,000	$1,532,000	$6,460,000	$28,780,000
No dental	13,948,000	6,143,000	1,478,000	6,216,000	27,785,000
No tuberculosis	13,489,000	5,988,000	1,452,000	6,185,000	27,114,000
No dental or tuberculosis	13,018,000	5,762,000	1,398,000	5,941,000	26,119,000
Exclusive of family:					
All benefits	9,545,000	4,396,000	1,128,000	4,253,000	19,322,000
No dental	9,074,000	4,170,000	1,074,000	4,009,000	18,327,000
No tuberculosis	8,615,000	4,015,000	1,048,000	3,958,000	17,636,000
No dental or tuberculosis	8,144,000	3,789,000	994,000	3,714,000	16,641,000
Medical at $4—					
Inclusive of family:					
All benefits	$14,419 000	$6,369,000	$1,532,000	$6,460,000	$28,780,000
No dental	12,003,000	5,280,000	1,285,000	5,273,000	23,841,000
No tuberculosis	11,544,000	5,125,000	1,259,000	5,222,000	23.150,000
No dental or tuberculosis	11,073,000	4,899,000	1,205,000	4,978,000	22,155,000
Exclusive of family:					
All benefits	8,603,000	3,944,000	1,020,000	3,765,000	17,332,000
No dental	8,132,000	3,718,000	966,000	3,521,000	16,337,000
No tuberculosis	7,673,000	3,563,000	940,000	3,470,000	15,646,000
No dental or tuberculosis	7,202,000	3,337,000	886,000	3,226,000	14,651,000

TABLE III.

Net Cost Per Annum Per Member.

Kind of benefit	Manfg., mining, building, transp.	Commercial, clerical	Professional and public service	Domestic and agricultural	All groups
Medical aid at $6—					
Inclusive of family:					
All benefits	$30 61	$28 18	$28 37	$26 48	$28 92
No dental	29 61	27 18	27 37	25 48	27 92
No tuberculosis	28 64	26 50	26 89	25 35	27 25
No dental or tuberculosis	27 64	25 50	25 89	24 35	26 25
Exclusive of family:					
All benefits	20 26	19 45	20 89	17 43	19 42
No dental	19 26	18 45	19 89	16 43	18 42
No tuberculosis	24 51	22 69	23 28	21 40	23 27
No dental or tuberculosis	17 29	16 77	18 41	15 22	16 72
Medical at $4—					
Inclusive of family:					
All benefits	26 48	24 36	24 80	22 61	24 96
No dental	25 48	23 36	23 80	21 61	23 96
No tuberculosis	24 51	22 69	23 28	21 40	23 27
No dental or tuberculosis	23 51	21 69	22 28	20 40	22 27
Exclusive of family:					
All benefits	18 28	17 45	18 89	15 43	17 42
No dental	17 28	16 45	17 89	14 43	16 42
No tuberculosis	16 29	15 77	17 41	14 22	15 72
No dental or tuberculosis	15 29	14 77	16 41	13 22	14 72

TABLE IV.

Net Cost Per Week (No Loading for Arrears).

Kind of benefit	Manfg., mining, building, transp.	Commercial, clerical	Professional and public service	Domestic and agricultural	All groups
Medical aid $6—					
Inclusive of family:					
All benefits	$0.589	$0.542	$0.546	$0.509	$0.556
No dental	.570	.523	.526	.490	.537
No tuberculosis	.551	.510	.517	.488	.524
No dental or tuberculosis	.532	.490	.498	.468	.505
Exclusive of family:					
All benefits	.390	.374	.402	.335	.373
No dental	.370	.355	.383	.316	.354
No tuberculosis	.352	.342	.373	.312	.341
No dental or tuberculosis	.335	.323	.354	.293	.322
Medical at $4—					
Inclusive of family:					
All benefits	.509	.468	.477	.435	.480
No dental	.490	.449	.458	.416	.461
No tuberculosis	.472	.436	.447	.412	.447
No dental or tuberculosis	.452	.417	.428	.392	.428
Exclusive of family:					
All benefits	.352	.336	.363	.298	.335
No dental	.332	.316	.344	.278	.316
No tuberculosis	.313	.303	.335	.277	.302
No dental or tuberculosis	.294	.284	.316	.254	.283

TABLE V.

Net Cost of Insurance in Per Cent of Wages (No Loading).

Kind of benefit	Manfg., mining, building, transp. (per cent)	Commercial, clerical (per cent)	Professional and public service (per cent)	Domestic and agricultural (per cent)	All groups
Medical cost at $6—					
Inclusive of family:					
All benefits	2.99	3.21	2.65	4.23	3.23
No dental	2.89	3.09	2.53	4.07	3.12
No tuberculosis	2.80	3.02	2.51	4.05	3.04
No dental or tuberculosis	2.70	2.90	2.42	3.89	2.93
Exclusive of family:					
All benefits	1.98	2.21	1.95	2.78	2.17
No dental	1.88	2.10	1.86	2.62	2.06
No tuberculosis	1.79	2.02	1.81	2.59	1.99
No dental or tuberculosis	1.69	1.91	1.72	2.43	1.87
Medical cost at $4—					
Inclusive of family:					
All benefits	2.59	2.77	2.31	3.61	2.79
No dental	2.49	2.66	2.22	3.45	2.68
No tuberculosis	2.40	2.59	2.18	3.42	2.60
No dental or tuberculosis	2.30	2.47	2.08	3.26	2.49
Exclusive of family:					
All benefits	1.79	1.99	1.76	2.47	1.94
No dental	1.69	1.87	1.67	2.30	1.83
No tuberculosis	1.59	1.79	1.62	2.27	1.76
No dental or tuberculosis	1.49	1.68	1.53	2.11	1.64

TABLE VI.

Net Cost Per Week, With 7.5 Per Cent Loading for Arrears.

Kind of benefit	Manfg., mining, building, transp.	Commercial, clerical	Professional and public service	Domestic and agricultural	All groups
Medical at $6—					
Inclusive of family:					
All benefits	$0.633	$0.583	$0.587	$0.547	$0.598
No dental	.613	.562	.565	.527	.577
No tuberculosis	.592	.548	.556	.525	.563
No dental or tuberculosis	.572	.527	.535	.503	.543
Exclusive of family:					
All benefits	.419	.402	.432	.360	.401
No dental	.398	.382	.412	.340	.381
No tuberculosis	.378	.368	.401	.335	.367
No dental or tuberculosis	.360	.347	.381	.315	.346
Medical at $4—					
Inclusive of family:					
All benefits	.547	.503	.513	.468	.516
No dental	.527	.483	.492	.447	.496
No tuberculosis	.507	.469	.481	.443	.481
No dental or tuberculosis	.486	.448	.460	.421	.464
Exclusive of family:					
All benefits	.378	.361	.390	.320	.360
No dental	.357	.340	.370	.299	.340
No tuberculosis	.336	.326	.360	.298	.325
No dental or tuberculosis	.316	.305	.340	.273	.304

TABLE VII.

Net Cost of Insurance in Percentage of Wages With Loading of 7.5 Per Cent for a 20 Per Cent Arrear Provision.

Kind of benefit	Manfg., mining, building, transp. (per cent)	Commercial, clerical (per cent)	Professional and public service (per cent)	Domestic and agricultural (per cent)	All groups
Medical cost at $6—					
Inclusive of family:					
All benefits	3.21	3.45	2.85	4.55	3.47
No dental	3.11	3.32	2.75	4.38	3.35
No tuberculosis	3.01	3.25	2.70	4.35	3.27
No dental or tuberculosis	2.90	3.12	2.60	4.18	3.15
Exclusive of family:					
All benefits	2.13	2.38	2.10	2.99	2.33
No dental	2.02	2.26	2.00	2.82	2.21
No tuberculosis	1.92	2.17	1.95	2.78	2.14
No dental or tuberculosis	1.82	2.05	1.85	2.61	1.99
Medical cost at $4—					
Inclusive of family:					
All benefits	2.78	2.98	2.48	3.88	3.00
No dental	2.68	2.86	2.39	3.71	2.88
No tuberculosis	2.58	2.78	2.34	3.68	2.80
No dental or tuberculosis	2.47	2.66	2.24	3.50	2.68
Exclusive of family:					
All benefits	1.92	2.14	1.89	2.66	2.09
No dental	1.82	2.01	1.80	2.47	1.97
No tuberculosis	1.71	1.92	1.74	2.44	1.89
No dental or tuberculosis	1.60	1.81	1.64	2.27	1.76

TABLE VIII.

Total Cost With Loading for Administration.

Kind of benefit	Manfg., mining, building, transp.	Commercial, clerical	Professional and public service	Domestic and agricultural	All groups
Medical cost at $6—					
Inclusive of family:					
All benefits	$15,805,000	$6,981,000	$1,681,000	$7,073,000	$31,540,000
No dental	15,334,000	6,755,000	1,627,000	6,829,000	30,545,000
No tuberculosis	14,875,000	6,600,000	1,601,000	6,798,000	29,874,000
No dental or tuberculosis	14,404,000	6,374,000	1,547,000	6,554,000	28,879,000
Exclusive of family:					
All benefits	10,501,000	4,834,000	1,241,000	4,671,000	21,248,000
No dental	10,030,000	4,608,000	1,187,000	4,427,000	20,253,000
No tuberculosis	9,571,000	4,453,000	1,161,000	4,376,000	19,562,000
No dental or tuberculosis	9,100,000	4,227,000	1,107,000	4,132,000	18,567,000
Medical cost at $4—					
Inclusive of family:					
All benefits	13,860,000	6,118,000	1,488,000	6,130,000	27,596,000
No dental	13,389,000	5,892,000	1,434,000	5,886,000	26,601,000
No tuberculosis	12,930,000	5,737,000	1,408,000	5,835,000	25,910,000
No dental or tuberculosis	12,459,000	5,511,000	1,354,000	5,591,000	24,915,000
Exclusive of family:					
All benefits	9,559,000	4,382,000	1,133,000	4,183,000	19,258,000
No dental	9,088,000	4,156,000	1,079,000	3,939,000	18,263,000
No tuberculosis	8,629,000	4,001,000	1,053,000	3,888,000	17,572,000
No dental or tuberculosis	8,158,000	3,775,000	999,000	3,644,000	16,577,000

TABLE IX.

Cost Per Annum With Loading for Administration.

Kind of benefit	Manfg., mining, building, transp.	Commercial, clerical	Professional and public service	Domestic and agricultural	All groups
Medical at $3—					
Inclusive of family:					
All benefits	$33 55	$30 89	$31 13	$28 99	$31 69
No dental	32 55	29 89	30 13	27 99	30 69
No tuberculosis	31 58	29 21	29 65	27 86	30 02
No dental or tuberculosis	30 58	28 21	29 65	26 86	29 02
Exclusive of family:					
All benefits	22 29	21 39	22 99	19 14	21 36
No dental	21 29	20 39	21 99	18 14	20 36
No tuberculosis	20 32	20 71	21 51	17 93	19 66
No dental or tuberculosis	19 32	19 71	20 51	16 93	18 66
Medical cost at $4—					
Inclusive of family:					
All benefits	29 42	27 07	27 56	25 12	27 73
No dental	28 42	26 07	26 56	24 12	26 73
No tuberculosis	27 45	25 40	26 04	23 91	26 04
No dental or tuberculosis	26 45	24 40	25 04	22 91	25 04
Exclusive of family:					
All benefits	20 31	19 39	20 99	17 14	19 36
No dental	19 31	18 39	19 99	16 14	18 36
No tuberculosis	18 32	17 71	19 51	15 93	17 66
No dental or tuberculosis	17 32	16 71	18 51	15 93	16 66

TABLE X.

Cost Per Week, With 7.5 Per Cent Loading for Arrears and Loading for Administration.

Kind of benefit	Manfg., mining, building, transp.	Commercial, clerical	Professional and public service	Domestic and agricultural	All groups
Medical at $6—					
Inclusive of family:					
All benefits	$0.694	$0.639	$0.644	$0.599	$0.655
No dental	.674	.618	.622	.579	.634
No tuberculosis	.653	.604	.613	.577	.620
No tuberculosis or dental	.633	.583	.592	.555	.600
Exclusive of family:					
All benefits	.461	.442	.475	.396	.441
No dental	.440	.422	.455	.376	.421
No tuberculosis	.420	.408	.444	.371	.407
No dental or tuberculosis	.402	.387	.424	.351	.386
Medical at $4—					
Inclusive of family:					
All benefits	.608	.559	.570	.520	.573
No dental	.588	.539	.549	.499	.553
No tuberculosis	.568	.525	.538	.495	.538
No dental or tuberculosis	.547	.504	.517	.473	.521
Exclusive of family:					
All benefits	.420	.401	.433	.356	.400
No dental	.399	.380	.413	.335	.380
No tuberculosis	.378	.366	.403	.334	.365
No dental or tuberculosis	.358	.345	.383	.319	.344

TABLE XI.

Cost in Per Cent of Wages, With 7.5 Per Cent Loading for Arrears, and 10 Per Cent for Administration.

Kind of benefit	Manfg., mining, building, transp. (per cent)	Commercial, clerical (per cent)	Professional and public service (per cent)	Domestic and agricultural (per cent)	All groups
Medical at $6—					
Inclusive of family:					
All benefits	3.52	3.78	3.13	4.98	3.80
No dental	3.42	3.65	3.03	4.81	3.68
No tuberculosis	3.32	3.58	2.98	4.78	3.60
No dental or tuberculosis	3.21	3.45	2.88	4.61	3.48
Exclusive of family:					
All benefits	2.34	2.62	2.31	3.29	2.56
No dental	2.23	2.50	2.21	3.12	2.44
No tuberculosis	2.13	2.41	2.16	3.08	2.37
No dental or tuberculosis	2.03	2.29	2.06	2.91	2.22
Medical at $4—					
Inclusive of family:					
All benefits	3.09	3.31	2.76	4.31	3.33
No dental	2.99	2.19	2.67	4.14	3.21
No tuberculosis	2.89	2.11	2.62	4.11	3.13
No dental or tuberculosis	2.78	1.99	2.52	4.93	3.01
Exclusive of family:					
All benefits	2.13	2.38	2.10	2.96	2.32
No dental	2.03	2.25	2.01	2.77	2.20
No tuberculosis	1.92	2.16	1.95	2.74	2.12
No dental or tuberculosis	1.81	2.05	1.85	2.57	1.99

Cost of Various Benefits.

Kind of benefit	Total cost	Annual cost per capita	Weekly cost	Weekly cost, with 7.5 loading for extended insurance	Cost in per cent of wages (no loading)	Cost in per cent of wages, with loading 7.5 per cent
Weekly benefit	$9,198,000	$9.244	$0.178	$0.191	1.03	1.11
Maternity:						
Cash	148,000	.149	.003	.003	.02	.02
Obstetrics	64,000	.064	.001	.001	.01	.01
Funeral	723,000	.727	.014	.015	.08	.09
Medical	3,980,000	4.000	.077	.083	.45	.48
Hospital	1,990,000	2.000	.038	.041	.22	.24
Drugs	1,990,000	2.000	.038	.041	.22	.24
Dental	995,000	1.000	.019	.020	.11	.12
Tuberculosis	1,686,000	1.695	.033	.035	.19	.20
Totals	$20,774,000	$20.878	$0.4015	$0.432	2.33	2.51
Deduct—						
Cost for hospital	$1,142,000	$1.148	$0.022	$0.024	.13	.14
First week's cash	2,300,000	2.311	.044	.047	.26	.27
Total deductions	$3,442,000	$3.459	$0.067	$0.072	.39	.42
Family—						
Medical	$3,919,000	$3.939	$0.076	$0.082	.44	.48
Hospital	1,960,000	1.970	.038	.041	.22	.24
Funeral	711,000	.715	.014	.015	.08	.09
Maternity	914,000	.919	.018	.019	.10	.11
Totals (family)	$7,504,000	$7,542	$0.145	$0.156	.84	.91
Grand totals	$24,836,000	$24.961	$0.480	$0.516	2.79	2.99
Administrative loading—						
Insured	$1,926,000	$1.936	$0.037	$0.040	.22	.23
Family	834,000	.838	.016	.017	.09	.10
Grand total cost	$27,596,000	$27.735	$0.533	$0.573	3.09	3.33

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